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# The Rise in Prices and the Cost of Living in Canada

1900-1914

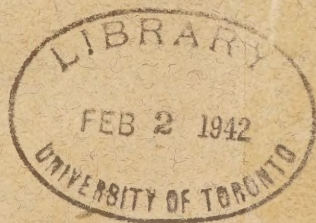
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## A Statistical Examination of Economic Causes

Synopsis of Exhibit

By the Statistical Branch, Department of Labour

Laid before the Board of Inquiry into the Cost of Living, 1915



OTTAWA:

PRINTED BY J. DE L. TACHÉ, PRINTER TO THE KING'S MOST EXCELLENT  
MAJESTY

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## PREFACE.

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Prices of particular commodities rise and fall to a considerable degree with tendencies that are nation-wide and even world-wide in their application. It is difficult to ascertain with clearness and finality what are the more important factors affecting the prices of a particular commodity by an investigation beginning and ending with the commodity itself; in the first instance an analysis of general economic conditions in the mass is expedient in order that the price movements of particular articles may be viewed in their proper setting. In prosecuting an inquiry into the cost of living, therefore, two purposes should be held in view: (1) a comprehensive survey of the kind described in order to provide a background for the interpretation of particular prices; (2) a more intensive investigation of the conditions surrounding the production, distribution and consumption of the commoner necessities.

An "Exhibit" representing an attempt to carry out the first of the above tasks has been prepared in the Department of Labour and laid before the Board of Inquiry into the Cost of Living. The "Introduction" of this Exhibit, with a summary of its findings, together with certain of the charts, are given in the following.

In view of present conditions, it was thought that a synopsis of this kind would be valuable and opportune, for, though written primarily to throw light on the causes of the rise in prices, its breadth of treatment renders it of interest from other scarcely less important points of view, such as unemployment, the industrial outlook, etc.

R. H. COATS.



DIAGRAM SHOWING THE COURSE OF PRICES IN CANADA,  
1890-1913.

# THE COURSE OF PRICES IN CANADA DURING THE TWENTY-THREE YEARS 1890-1913 (inclusive).

Number of Commodities: 272.

Average Prices, 1890-1899=100.





# THE RISE IN PRICES

## AND THE

### COST OF LIVING IN CANADA, 1900-1914

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#### INTRODUCTION.

At the outset of any inquiry into a subject so many-sided as the present, it is essential to define its scope, that is, to discuss the precise meaning to be attached to the term "cost of living," otherwise its very familiarity may prove a pit-fall, where so much depends upon clearness and accuracy of expression.

#### "The Cost of Living."

Broadly, the "cost of living" means the sum of the exertions and sacrifices (the "efforts" and "waitings" of the economist) necessary to maintain life;\* and a "change in the cost of living" means (in the same broad way) any variation in the degree of effort by which a livelihood is gained. Inasmuch as the common measure of such "exertions and sacrifices" is money, the "cost of living" in the usual acceptance means the amount of money paid out for subsistence, and a "change in the cost of living" means any variation in the volume of such payments.

#### Factors in the Cost of Living.

Thus the first obvious factor in Cost of Living is Price—the rate at which subsistence may be purchased. But clearly Price is not the only factor. If the amount of money coming into possession of the individual is adjusted simultaneously with any change through price in the amount going out, then there has been no real change in conditions—no change at any rate constituting a problem on the score of alteration in "real" Cost of Living.† The problem arises where correspondence of this kind is lacking—where the one has lagged behind the other or taken a contrary direction.

Earnings in turn depend on more than one consideration. They depend on rates of remuneration, or wages. But quite as much they depend on the volume of employment, or the extent to which the services of the earner are requisitioned.

Still another factor is the "standard of living". If individuals or communities from time to time change their manner of living to a higher or lower plane, this again will enter in the most intimate way into the cost of living.

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\*See Report of the Royal Commission on the Cost of Living in New Zealand, 1912, pages x-xi.

†The problem of the cost of living in its completeness is a problem of the purchasing power of incomes, and the purchasing power of any income is dependent on two factors of which the purchasing power of the dollar is only one; the other is the number of dollars in that income." Irving Fisher, *"Why is the Dollar Shrinking?"*

Thus, from a broad point of view, the "cost of living" involves the whole gamut of relationships between incomes and spendings. The investigation of it must take count not only of the factors just mentioned but of their relations and influences *inter se*; for they are not separate and isolated phenomena, but are bound up inextricably with each other, and constitute little less than the entire economic activity of the community.

### Significance of "High" and "Low" Prices.

This breadth of outlook is especially necessary in approaching the subject of prices, with which cost of living studies begin, and especially "high" and "low" prices. It is apparent that to estimate "real" cost of living in terms of price alone is to proceed upon too narrow premises. Yet no practice is more common. High prices are usually mentioned as synonymous with difficulty in obtaining the means of living, low prices as synonymous with ease in the same process. But, by the verdict of history, the very reverse is oftener the case. High prices usually, though not invariably, prevail when trade is active and opportunities for employment at good wages are numerous; low prices when trade is dull, employment unsteady, and wages low or falling. Low prices, it is true, enable commodities and services to be bought for little; but that little *may* at such a time be exceedingly difficult to acquire. A prolonged depression in prices is almost invariably a concomitant of business inertia, leading often to widespread social disturbance and even to political revolution.\* On the other hand, a rise in general prices, though it makes living dear, has ordinarily the effect of stimulating hopefulness and energy in the business world and thus of making earnings even more than proportionately plentiful. Credit, on which the whole structure of trade is built, expands. It becomes the turn of the debtor class, a term which includes the employer, (the keystone of the modern industrial arch). The great wage-earning class, though it may find difficulty for a time in obtaining its share, and may express its discontent in strikes involving losses both to itself and the community, gains in the long run from the increase in production,—the only source from which a general gain is possible. Certain others are losers: holders of bonds and long-time securities; savings bank depositors on stable rates of interest; those whose salaries are fixed by law (civil servants, the beneficiaries of pension funds, etc.); those paid by tolls or fees established by custom (though these will profit by an increase in trade). There is always, of course, the serious danger that the "good times" may discourage economies and improvements, and that under their influence buoyancy may be fanned into non-productive speculation, when the high prices will represent fictitious values and be wholly evil. Moreover, a check to activity when prices are high causes suffering of an especially acute kind, the diminution in purchasing ability coming at a time when the severest demands are being made upon it. The matter is one on which no final generalization is possible; nor is it to be assumed that the general price level in itself is a barometer of welfare; but it would appear upon the whole that, reckoning the losses with the gains, a rise in prices, provided it be distributed, and is neither sudden nor extreme, tends to be beneficial in its influence, and thus to lessen the real problem of winning a livelihood, while a decline tends to the opposite. (See Note A., p. 9, *Significance of Variations in the Price Level*.)

\*According to Sir Archibald Alison, "the two greatest events which have occurred in the history of mankind" have been directly caused, the one by low and the other by high prices. These events were the fall of the Roman Empire, which, according to Sir Archibald, "was in reality brought about by a decline in the gold and silver mines of Spain and Greece," and the Renaissance, which he ascribes to the discovery of the mines of Mexico and Peru. The depressions of the 1840's and the 1890's, with their accompanying unrest, (both periods of extremely low prices) are within easy memory. (Cf. Nicholson, *Money*, p. 61).



The reason for the narrow interpretation attached to the phrase "cost of living" is, of course, on the surface. In times of falling prices, the agencies operating most visibly are "bad times", "depression of trade", etc., frequently ascribed to "over-production". When, however, in times of high prices any failure in earnings occurs, the factor that stands out is the large amount of money required to buy subsistence, and the point of attack becomes the "high cost of living".§

### The Situation in 1913-14.

It is a situation of the latter kind which exists in 1913-14. Canada, and indeed the world, stands at the apex of a rise in prices that has been in progress almost continuously (occasional recessions being followed by recoveries and the attainment of still higher levels) for a decade and a half. At times within that period the rate of increase has been rapid beyond modern precedent. In this country, the final result has been an advance of approximately fifty per cent on the average, and of considerably more in the case of several of the most important articles of consumption—an advance that has revolutionized the terms in which the individual reckons his expenditures. On the other hand it has been a period of marked "prosperity," with all implied in the term in the way of expanding trade, buoyant public revenues, enhanced valuations, and abounding opportunities for profitable investment and employment. But though the adjustment of wages scales has been continuous, and Canada has been free from labour disturbances of the colossal kind that have occurred in England, the persistent nature of the rise has rendered such adjustments obsolescent almost as soon as made. Especially during the years 1910-11-12 has this been true. Finally, in 1913, after eighteen months of exceptional rapidity in the upward movement, a check to the price rise was administered by the prevailing financial stringency. But, while prices were on the whole but little higher in 1913 than in 1912—with foodstuffs and rents in many localities actually somewhat lower—complaints as to the high cost of living were much more prevalent in 1913-14, largely, no doubt, through the coincidence of unemployment with diminished earning capacity at a time when prices stood at the highest in a generation.\*

### Purpose and Scope of the Present Memorandum.

The foregoing analysis of the problems involved in "real" cost of living was thought necessary for the sake of clearness before defining the purpose and scope of this memorandum. Briefly, that purpose is to present in a broad way

§"The economists," says Taussig (*Quarterly Journal of Economics*, XXVII, 413), "speak of the 'rise in prices'; the general public speaks of the 'high cost of living'. It results from the fact that very different phenomena are had in mind by the two sets of persons. The economist is thinking and reasoning about . . . the general rise of prices. The man on the street is thinking about the exceptional rise in the prices of one important set of commodities. . . . The general rise is not unwelcome."

The two nevertheless are very apt to be related. Irving Fisher says (*American Economic Review*, Sept., 1912): "The phrase 'cost of living' . . . is usually taken as referring only to special groups of commodities, mostly foods, and only for the retail prices of these commodities. The general level of prices, on the other hand, means the level of all prices, whether retail, wholesale, jobbing, factory or farm prices, and of all commodities, whether of food, raw material, machinery, land, stocks, bonds, or any other goods whatsoever which are bought and sold. Now, the 'cost of living' will go up and down with the general level of prices and at the same time fluctuate from special causes of its own. . . . The statistics of the past indicate that the recent rise in the cost of living has been for the most part due to the general rise in prices of all kinds, and only to a small extent, if at all, to special causes applying to the retail price of foods." Without necessarily accepting the view of the last sentence, the necessity of considering the "cost of living" in its general price-setting is patent.

\*The agitation to which the advance in the cost of living has given rise has taken on various forms. On the continent of Europe the general unrest has been marked by bread and meat riots in Austria, socialist victories in Germany, and popular demonstrations in France and Italy. In Great Britain, as noted, the strikes of labour have been on a scale unprecedented before. Outside of Europe the wave of discontent has passed from Tokio to Buenos Ayres. The Chinese Revolution was said to be largely due to the advance in rice. In the United States a significant development has been the formation of

the more important data bearing upon the great rise which has taken place in the prices of necessaries during the past fifteen years, (1) the facts and (2) the causes, this being the general plan suggested by the Order-in-Council appointing the Board of Inquiry.

*Methods of Investigation.*—There are two methods possible in investigating the cost of living problem which though by no means antagonistic,—being in fact complementary—yet involve a radically different initial approach. The first is the obvious one of seeking information in as full detail as possible with regard to the production, distribution, and consumption of the common necessities in Canada, including foods, (meats, cereals, dairy products, fish, fruits, etc.), clothing, housing, and fuel.‡ What has been the increase in the price of important staple articles under each of these headings, and what are the circumstances immediately connected with the rise? Have supplies fallen off? Have demands increased? Have methods in connection with the production, distribution and consumption of each of these great staples changed? Direct and searching investigation of these and similar nearby and familiar phenomena is the method of treating the cost of living problem usually regarded as “practical”. Incidentally such investigation may be extended to reveal the workings of certain local factors whose influence is not confined to any one article or group of articles; “cross-sections” may as it were be taken to observe the operations of such phenomena as trusts and combines, the tariff, market policies, cold storage, etc.† It is, in brief, the method of proceeding from the particular to the general. The difficulty it presents in so vast a field is that, being intensive, it is necessarily limited, and is apt, therefore, to engender confusion—especially the confounding of cause with effect, as in the frequent explaining of one price by another. It may tend to prevent the forest being seen because of the trees.\*

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Housekeepers' Leagues in various cities. In Canada the movement for higher wages has been steadily in progress, being most active in 1903, 1907 and 1912; public meetings have been held in various localities for the discussion of the question; resolutions have been passed by public bodies; investigations held by Boards of Trade, etc. Everywhere has been continuous debate as to the causes of the change and the remedies available. A writer has compiled a list of eighty “causes” adduced in one country or another, “while in every country political parties in opposition have as usual attributed the rise to the actions of the parties in power.”—Layton (*Introduction to the Study of Prices*, p. 2). Governments have shown increased energy in prosecuting enquiries and publishing data, special reports on prices having been issued in the United Kingdom, Australia, New Zealand, Canada, the United States, and most of the countries of Europe. The “High Cost of Living” has been the subject of a special message to Congress by a President of the United States suggesting the calling of an International Conference on the subject. Massachusetts and New Zealand, like Canada, have appointed special commissions for the investigation of facts and causes.

§By the “necessaries of life” are usually meant the universal needs of the mass of the people including the commoner luxuries or “conventional necessities.” Marshall (*Economics of Industry*, p. 60) distinguishes between “necessaries for existence” and “necessaries for efficiency,” defining the latter for a workingman in England as “a well-drained dwelling with several rooms, warm clothing, with some changes of under-clothing, pure water, a plentiful supply of cereal food, with a moderate allowance of meat and milk, and a little tea, &c., some education and some recreation, and lastly, sufficient freedom for his wife from other work to enable her to perform properly her maternal and her household duties.”

†Irving Fisher (*Why is the Dollar Shrinking?*, p. 191) continues the list: “Labour unions, shortened hours of labour, the middleman, longer hauls on railroads, marketing by telephone, the free delivery system, the individual package, the enforcement of sanitary laws, advertising, unscientific management, food adulteration, wars, armaments, extravagance, concentration of population in cities, impoverishment of the soil, the displacement of the neighbourhood farmer, and the high cost of land.”

\*“The people who look to a microscopic study of each individual commodity in order to understand the general movement of all commodities cannot see the woods for the trees.”—Irving Fisher, *Why is the Dollar Shrinking?*, p. 190.

Mr. J. A. Hobson whose *Money, Prices and Wages* is frequently cited in the following pages as a leading English opponent of the gold theory and as attributing the rise in prices largely to conditions affecting the demand and supply of individual commodities, regards it a “hopeless task to endeavour to explain a rise or fall of general prices by a series of separate investigations into each several sorts of goods,” though he adds, “this admission cannot preclude the investigation of phenomena of a wider causality which affect the production and the prices of whole groups or classes of goods.” (pp. 96-97).



The second method is the opposite, that, namely, of proceeding from the general to the particular. It involves, of course, at the outset, the assembling of a large number of particular facts; but its first concern is to examine these not singly but in the mass, by broad analyses, for the discovery of general tendencies and the essential characteristics of the situation. Thus it would start in the present case with the broadest fact of all, namely, that the rise is not confined to any one country but is practically world-wide. From this extended view would emerge the second broad fact—that though the rise has been general it has been greater in some countries than in others. Where stands Canada in the list and what accounts for her place? Clearly, we shall have gone far towards providing a key to the situation if an answer to any purpose can be given to the question (1) What has been the world-rise in prices, and its causes? and (2) Wherein is the rise which has taken place in Canada peculiar in its nature and extent, and to what may we attribute this peculiarity?

It is to this broad treatment of the subject that the present memorandum is addressed, on the ground that a view of this kind is a necessary preliminary to any detailed investigation having to do with phenomena singly or locally, or to the framing of public policy for the alleviation of conditions.

*Scope of Data Required.*—A word must be added as to the scope of the data required to yield this point of view. First, as to prices—the “facts” of the inquiry: Prices of commodities at retail are, of course, those immediately connected with the cost of living. But they are not enough where the search is for broad and sometimes latent influences. Wholesale prices and those of the great primary markets are on account of their greater sensitiveness the barometer of these. However, a brief consideration will show that even the entire range of commodity prices—producers, jobbers, wholesale and retail—is too narrow. Data are needed covering the whole field or system of which commodity prices are only a part. That field includes—besides (a) prices of commodities.—(b) the prices of “services,” like transportation and medical attendance; (c) rents, the price paid for the use of land; (d) wages, the price of labour; (e) interest, the price of money loans; and (f) security prices, the price of enterprises as going concerns. The close relationship which exists between these makes it necessary to consider all when the purpose is to divine the true significance of changes in any one of them.§

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§See Mitchell, *Business Cycles*, p. 27, on the System of Prices. Mitchell gives the following tabular survey to assist in obtaining a general view:

“Prices of consumers’ commodities charged by:

Retail dealers. ✓  
Wholesale dealers.  
Manufacturers.

“Prices of producers’ goods:

Raw materials.  
Current supplies.  
Machinery.  
Building, etc.  
Leases.  
Labour.  
Bank loans.  
Investment loans.  
Transportation.  
Insurance.  
Advertising.

“Prices of business enterprises.

“Prices of services to persons.

He adds: “Behind the prices of each group entered in this classification stands an equally complex

The price system, then, represents the "facts" in the case. The search for causes leads to the consideration of a very wide field which may be roughly divided into two parts: (1) the phenomena connected with monetary conditions, and (2) the phenomena of the commercial and industrial world,—prices being to a degree the result of a balance between the money supply and goods. In these sections, as in the preceding, a wide view is first necessary in order to differentiate what has occurred in Canada from the general experience, and thus indicate the line which more detailed analysis of Canadian conditions should follow. (See Note B., p. 11, *Causes of Variations in Prices of Commodities.*)

### Plan of Memorandum.

Though the above reveals the general plan according to which the data are presented, a further explanatory statement may be in place:

Part I. As above stated, the "facts" of the situation are dealt with in six sections:

1, *Prices of Commodities.* Commodity prices in Canada are the natural starting point. In the first chapter a review of wholesale prices is given, the findings being based on continuous quotations for about 300 representative articles at one or more wholesale centres back to 1890. Index numbers for about twenty groups are given and various analyses are made. Retail prices are next taken up, (chapter II) the quotations covering 34 articles at over 50 localities scattered throughout the Dominion back to 1900, the articles including the more important staples of household consumption, and the localities being those having a population of 10,000 or over. Two addenda to this chapter deal respectively with prices of clothing and the comparison of wholesale and retail price trends in Canada. In the third and final chapter of this section are assembled the best known index numbers of prices in other countries including the United Kingdom; the United States; the following British Dominions, namely, Australia, New Zealand, South Africa and India; and other foreign countries, as follows: France, Germany, Austria-Hungary, Italy, Belgium, Holland, Norway, Russia, Japan, and Argentina. A feature of this chapter is a series of comparative index numbers for Canada and each of the countries, based on exactly the same commodities. A world index number of prices has also been constructed. With an analysis of the different manner in which certain groups have moved in different countries, a preliminary view is obtained of the circumstances underlying the rise, and the factors chiefly contributing to it.

(2) *Services.* In Section 2, statistics for Canada are assembled for the following services: water, lighting, gas, taxation, railway transportation, and medical attendance. Index numbers for each have been constructed.

(3) *Rents.* Business and workmen's rents in some 50 representative localities in Canada are treated; statistics for various foreign countries are added.

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array of antecedent prices, and between the several groups exist inter-relations too intricate to be set forth in tabular form."

Nicholson points out: "A rise in the price of certain classes of things may have a much greater effect on general monetary conditions than a corresponding rise in other things, and conversely of a fall. A general rise in the price of labour will so far cause a greater demand for metallic money than would a corresponding rise in stock exchange securities. Similarly a drain to meet the expenses of an adverse balance of trade, due to over-importation or exceptional dearness, has in general a much greater effect on general prices than the receipt of a corresponding balance for excess of exports. The relations of general price levels in various countries are also dependent largely upon relative prices." *Principles of Political Economy*, Vol. III, pp. 61-2.



(4) *Wages.* The wages statistics have the two-fold purpose of showing to what extent earnings have kept pace with the rise in prices, and also to what extent their increase represents an added change in expenses of production. The chapter represents the first attempt to compile an index number of wages for Canada for the more important classes, ranging from agricultural labour, mining, through the skilled trades, inside and outside, to unskilled labour. The wages trends in the United Kingdom, the United States and other countries are indicated.

(5) *Security Prices.* The index numbers of Canadian Securities, including common stocks, preferred stocks, and bonds, are also new, and will be found a valuable barometer of Canadian conditions since 1900. The data include all listed securities for which a continuous record exists back to 1900. The British and American stock markets are covered, and the leading government securities of the world recorded in a chapter on the "Credit of Nations".

(6) *Interest.* The trend of interest is illustrated for both long time and short time loans, the former being represented by statistics of city and farm mortgages and earnings of bonds, and the latter by the call and market loan rates at the leading financial markets of the world, prices of bonds, etc.

## Part II. "Causes" are dealt with as follows:

(1) *Monetary Conditions.* Data are here assembled for the study of the most abstruse of all economic problems—the quantity theory of prices. Prefaced to the data is a chapter stating the theory, outlying the main points of controversy, and reviewing the leading opinions that have been put forward in the past ten years with reference to the present price rise. This is followed by a chapter giving an historical sketch of prices from the earliest times to 1896, with the object of showing present conditions against the background of history. In the third chapter the monetary statistics of the world are given under the following headings: production of gold since 1492; gold stocks; absorption of gold in the arts, bank reserves, and currencies of various countries; international movements of gold; and the expansion of credit. This is followed in chapter IV by a more detailed analysis of the monetary and financial situation in Canada since 1900.

(2) In the second section of Part II a résumé is given of certain statistics which illustrate the more important economic developments in Canada of the past fifteen years. This largely takes the form of an analysis of Canadian progress against the world background. The method, broadly, is to regard the country as a "going concern," and to investigate the growth and distribution of its "working" capital since 1900 (chapter I) the growth and distribution of labour (chapter II), the returns therefrom in production (chapter III), the distribution problem (chapter IV), and the standard of living (chapter V)—all for the purpose of throwing light on the course that prices have taken.

**Summary.**—A closing section (Part III) brings the outstanding results of the investigation together and permits a general view of the "facts" and "causes," with particular reference to the stage now reached in the economic progress of the country.

\* \* \*

While the shortcomings of the treatment are recognized, it may be pointed out that time and means were both limited for so comprehensive a task, especially when it is remembered that on several not the least important phases it was necessary to create the statistics. The period in question is certainly the most remarkable through which the Dominion has passed: in some respects the most

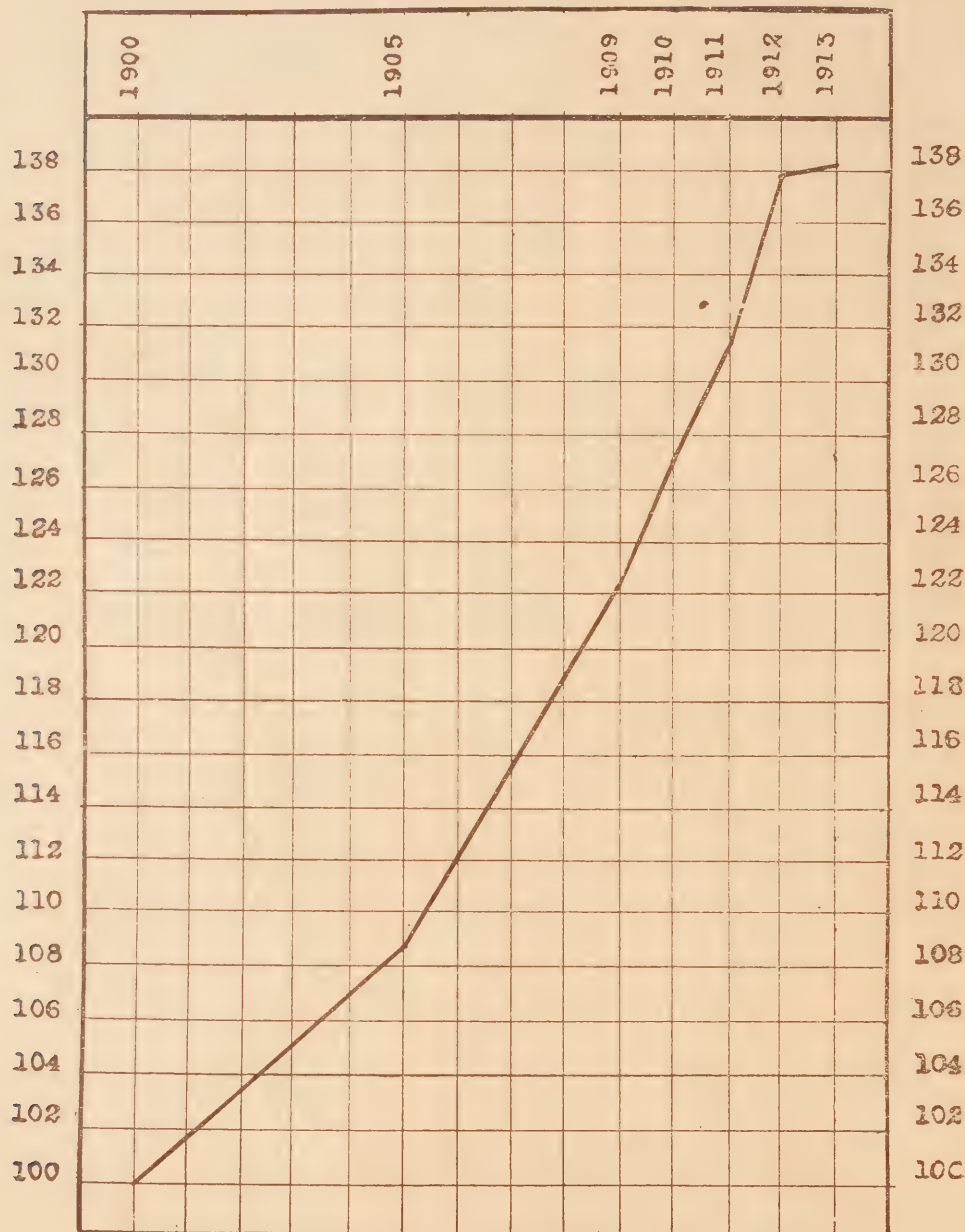
remarkable through which any country has passed; and the incidents are numerous that require elucidation. On the other hand, the voluminous nature of the memorandum may be regretted, inasmuch as it is a matter of close personal interest to the public as well as to the trained observer, and so large an array of figures in certain parts wears a forbidding look. But it must be admitted that in a subject where almost every point is matter of acute controversy, it is essential to afford the means of private judgment and to supply the materials for interpretation even more scrupulously than to venture the interpretations themselves. In point of fact it was made a deliberate object to assemble all readily available data, as for instance in the section on Monetary Conditions, which have not previously appeared in Canada except in the publications of other countries. From this point of view it is their paucity rather than their abundance that is the defect. Those who have not the time to examine the matter closely may thus pass over Parts I and II, and proceed at once to the summary in Part III. A further feature, that of the self-contained nature of certain of the sections, has grown out of the desire to supply materials for the study of Canadian conditions; this will be overlooked when it is remembered that the subject of the cost of living is as many-sided and as involved as it is practically important.

*NOTE.—Part I and Part II, which are omitted here, comprise about 1,000 pages of statistical and other matter.*



## PART III. SUMMARY OF FINDINGS.

## THE COURSE OF RETAIL PRICES, CANADA, 1900-1913.

*Number of Articles Included, 34 (weighted).**Prices in 1900=100.*



## PART III.—SUMMARY.

### THE RISE IN THE COST OF LIVING IN CANADA AND ITS ECONOMIC CAUSES.

During the past fifteen years there has been a rise in the cost of living in Canada that may be set down approximately as 50 per cent. The prices at wholesale of 272 representative articles, selected over the entire field of production and consumption, have risen 48 per cent since 1900. The retail prices of over 30 articles which enter chiefly into domestic consumption have advanced, say, 40 per cent. Rents are up 60 to 70 per cent. The main purpose of the present investigation has been to explain from an economic standpoint the conditions which have produced a change so revolutionary in its effect upon the individual and the community.

In presenting a summary of the inquiry, opportunity has been taken to rearrange the conclusions somewhat, by way of correlating them anew to the problem of the memorandum as a whole. They are given, of course, in briefest form; for the statistical demonstration of the various statements the reader is referred to the memorandum proper.

#### Initial Steps and Findings.

The method of the investigation, as explained in the introduction, was in the first instance to collect as complete data as possible with regard to the rise throughout the whole field of prices (prices of commodities, "services," rents, wages, prices of securities, and interest) covering all countries for which official or other reliable data were available,\* the object being by the examination of phenomena in the mass to detect broad tendencies and the influences which affect considerable sections of the field. This method may be distinguished from an intensive study of the conditions surrounding individual articles, necessarily limited in number, in which the action of general and ultimate causes is apt to be obscured.

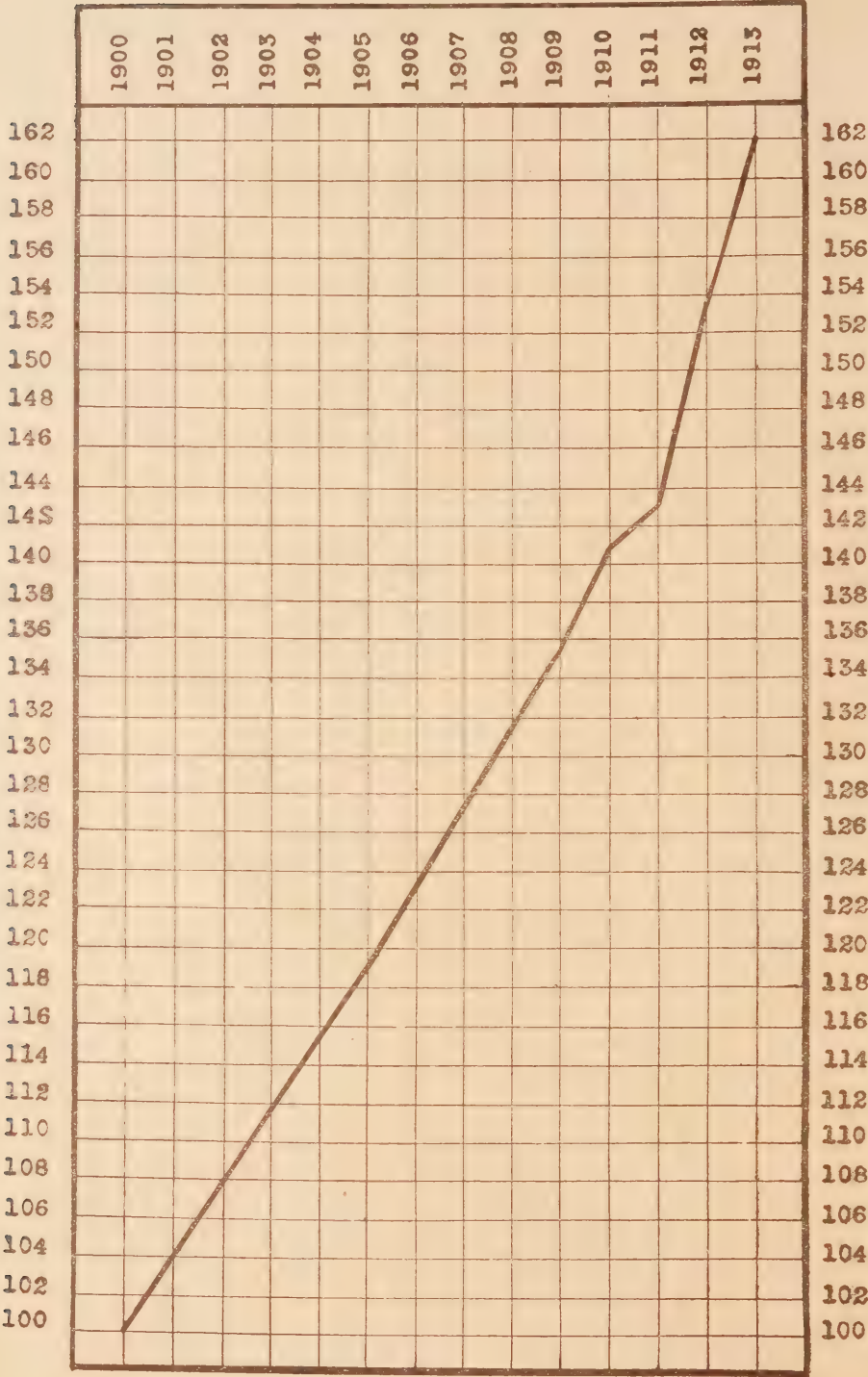
Examining the situation thus in its general setting, the rise in prices appears at once as a world-wide phenomenon. In every country for which statistics have been collected prices in the twentieth century have been characterized by buoyancy. Averaging the returns for the nine leading countries of Europe, together with Japan, Australia, New Zealand, the United States and Canada—14 in all—the rise in wholesale prices has been about 24 per cent and in retail about 31 per cent. But simultaneously two facts emerge on the most cursory view which strongly indicate the advisability of other than general treatment. These facts are, (1), that the rise has differed considerably in extent in different countries, and (2), that different commodities and groups of commodities have responded to the stimulus in varying degrees. It is obviously the first duty to extend and analyse these two statements.

#### Analysis of the World-Rise in Prices.

(1) Investigation of the available statistics reveals that the leading countries may be divided very roughly into three groups according to the extent to which their prices have risen. In a first group—in which prices have advanced least—may be placed the United Kingdom, France, Italy, Belgium, Holland and Norway; here the rise has been, say, 15 to 20 per cent. In a second group stand

\*Namely, the United Kingdom, France, Germany, Austria-Hungary, Italy, Belgium, Holland, Norway, Russia, Japan, India, Australia, New Zealand, South Africa, Argentina, the United States and Canada.

THE COURSE OF HOUSE RENTS, CANADA, 1900—1913.  
(Rents 1900 = 100).





Germany, Austria, Russia, India, Australia and New Zealand, having a rise that may be placed at 25 to 35 per cent. In a third group, where the rise has been most pronounced, approaching 50 per cent, fall Japan, Hungary, the United States and Canada. For house rents the available data are much less complete, but the tendency conforms, though with a difference, to the above. In England, they have been steady; in France and Norway, they have risen 5 and 8 per cent respectively; in Australia they are up 40 per cent and in New Zealand somewhat less; in the United States they have been very buoyant; while in Canada, South Africa and Argentina the rise is probably 60 or 70 per cent. It should be added that notwithstanding the differences above indicated, the general direction of the price movement in its ups and downs has been much the same (though not invariably so) in all countries. In other words, the impulse would appear to have been general, but to have depended for its intensity upon local conditions.

(2) It is not so easy to generalize with regard to commodities, which are many in number and subject to varying influences. Meats, grains and dairy produce, with the associated group hides and leathers, are up the most; fish and lumber perhaps next; metals, coal, and drugs among the least,—the first mentioned showing little rise at all. But it would be confusing at this point to go into details. A broad division of commodities is into foods and materials. Speaking generally, the rise has been considerably more pronounced in foods, especially in recent years. The "world" index number arrived at in the investigation for foods in 1913 was 125.8 (representing prices in 1900 as 100) and for materials 117.8; the "spread" between the two in 1912 was even greater, the food index being 134.0 compared with an index of 114.7 for materials. It may be added that raw products have similarly shown a tendency to rise faster than manufactured articles (30 per cent compared with 18 per cent in 1913; 35 per cent compared with 17 per cent in 1912.)

But it is in the combination of these points of view—the analysis by countries and the analysis by commodities—that the most interesting fact is discovered. It would appear that in the countries where prices have advanced most rapidly—Germany, Austria-Hungary, Japan, the United States and Canada,—foods have risen considerably more than materials, but that in the countries where prices have been less buoyant—the United Kingdom, France, Italy, Belgium, Holland,—the two groups have advanced at about equal pace. Materials have been much the same in trend the world over, rising 10.4 per cent in Europe and 10.5 per cent in North America; foods, however, have varied widely with locality, rising at least twice as much in America as in Europe. It is in foods, therefore, that we shall presumably find the explanation of the vagaries in the price averages of the different countries.

### Outline of General Economic Conditions—Economic Trends and Prices.

Now this is very significant, for it yields a working hypothesis as to the nature and origin of the influences that have had the greatest effect on prices since 1896 and particularly during the past ten years. The period, speaking broadly, and with the purpose only of the most general characterization, has been one of great prosperity: "good times" have been everywhere the rule. The immediately preceding period, on the contrary, was one of exceedingly "bad times",—a period when, the world over, a bitter agitation was in progress against low prices (1896 saw the "cross of gold" campaign in the United States.) The price rise, in fact, in its earlier stages was two-thirds reaction from the lowest level in over 100 years—lower even than during the great depression of the eighteen-forties. (Incidentally it may be added that at their highest, recent prices fall below those of

1870-1872, and still further below those of 1812-1815).<sup>\*</sup> For a quarter of a century prior to 1896, supply had steadily gained on demand, until "overproduction" brought on stagnation. Credit was exceedingly contracted. The situation worked its cure first and partly through a great increase in consumption. But this soon gave way to a more positive stimulus. A period of marked expansion set in, based as usual upon credit extensions. (To the exceptional financial conditions involved, reference will be made later on). With agriculture once more on a paying basis, and with population rapidly increasing, there began early in the present century a great forward movement to extend the areas devoted to the production of foods and raw materials. Capital in large amounts began to flow from Great Britain, the home of investment funds, in the direction of the "new" countries, notably Canada, Argentina and Brazil. France sent large sums to Russia, Austria and Turkey. Germany made considerable investments abroad, notably in Austria and America. All the capital producing countries, including now the United States, spent large sums within their own boundaries mainly on industrial development. But it is with the export of capital by Great Britain during the past few years that we are here primarily concerned. Great Britain as above stated is not only the home *par excellence* of investment capital in general, but on account of her more adventurous financial policy is peculiarly the source of loans for the "new" countries and is accordingly the major factor in the expansion as affecting Canada. Sir George Paish, Joint Editor of the *London Statist*, has estimated that since 1907 alone approximately \$5,500 millions have been sent abroad from the British Isles, for investment primarily in undertakings having for their object the bringing into the international trade scheme of new productive areas.<sup>†</sup>

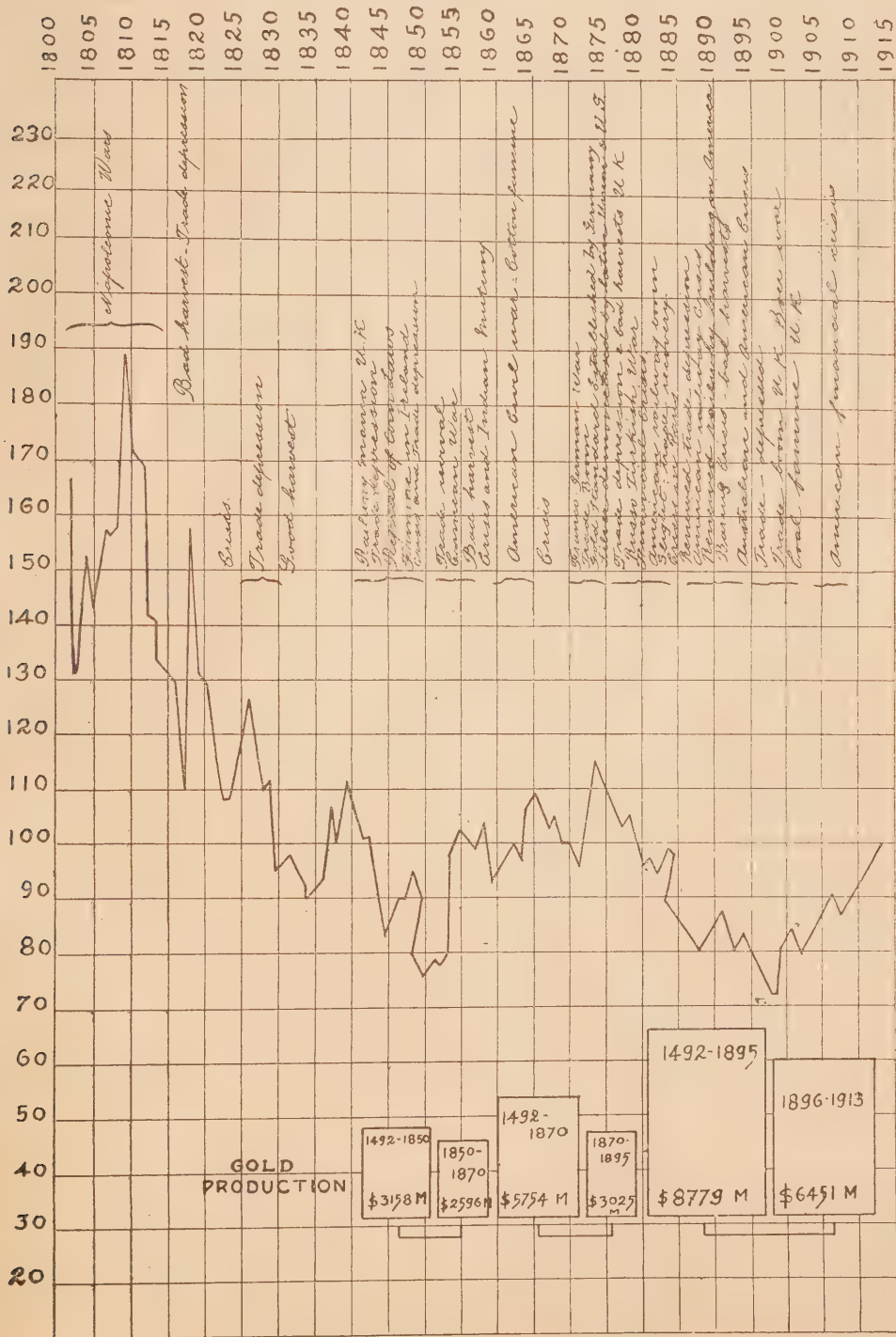
It has been pointed out in some detail in the Introduction that prices reflect the general economic trend and that the phenomenon known as "prosperity" or "expansion" is almost invariably accompanied by a rise in prices. This is primarily because "expansion" involves in the first instance a turning aside from the usual activities of production to the providing of additional "plant" or "equipment." Equipment in the making does not "produce" at all in the economic sense and not to full capacity often for long periods thereafter, being always planned to a degree against the future. Hence in the meantime a stimulating effect on general prices, seeing that the demand for materials and labour thus created has for the time being no offset in the form of additional supply. That effect is of course greatly aggravated when the new activity takes the form of opening up remote areas to settlement, with an extensive programme of railway construction, town building, road-making and general industrialization. Such operations are not only of the largest of their kind and thus the longest in becoming fully productive, but they are carried out in comparatively undeveloped communities, where the disturbance they create economically is at its maximum. Hundreds of millions may be expended on such enterprises in a highly industrialized country like England with little influence on prices, where a less expenditure in a small agricultural community would be followed by a considerable rise. It is important to note, therefore, that according to the observations of Sir George Paish, no less than four of the

<sup>\*</sup>The course of prices has been traced with a considerable degree of accuracy since the discovery of America. After a great rise in the Sixteenth and Seventeenth Centuries, due to disorganization of the monetary system caused by the new silver from America, they remained steady for a century and a half, beginning to rise again about the time of the American Revolution. By 1812-1815, they had reached perhaps the highest point ever recorded. Afterwards they fell steadily and at times rapidly until 1848. The next quarter century saw a remarkable rise, though not to the point of 1815. This was followed by twenty-five years of decline which brought the general level by 1896 as above remarked to the lowest point in over a century. When relief from the present high prices is demanded it is often forgotten that a return to the conditions with which the present is naturally contrasted would be for many reasons undesirable. Low prices, of course, mean cheap living, but they are very apt also to mean stagnation of trade and unemployment. The point is fully discussed in the Introduction (p. 2, and Note p. 9) and also in the "Historical Sketch of Prices" included in Part II (page 775 and in particular pp. 788-9 and 796 and Note F, p. 46.)

<sup>†</sup>In 1914, Great Britain was estimated to have \$20 billions invested abroad in every part of the world, about half being in North and South America. French foreign investments were estimated at \$9 billions, nearly all on the Continent of Europe. German investments abroad were placed at \$5 ½ billions, largely in Europe, but also in America and Asia. These are, of course, the three great lending countries of the world.



THE COURSE OF PRICES IN ENGLAND DURING THE NINETEENTH CENTURY AND AFTER.



five and a half billions of capital above mentioned as having been exported from the British Isles since 1907 have been devoted to enterprises of just this character, namely, the construction of railway lines and municipal improvements in new countries, the countries to which Great Britain is looking more and more for her supplies of foods and raw materials. Altogether 140,000 miles have been added to the railways of the world since 1900—an increase of 47 per cent—in new countries alone. The tonnage of vessels in the world has increased almost a rapidly.\*

Applying the above to the international price situation previously defined, it will be remarked that it is precisely where expansion has been in progress that the rise in prices has been accentuated, and especially where the expansion has been of the kind just mentioned. England, France, Belgium and Holland, have witnessed no revolutionary changes economically during the past decade and have maintained comparative stability of prices. These countries have, of course, added materially to their industrial resources, but the additions have been to systems already large and complex. Countries like Japan and Germany on the other hand, have gone forward industrially to a much greater relative degree, and the same is true of India, New Zealand and Australia, where prices have been considerably more buoyant than in the countries first named. Austria-Hungary is an example of a European country largely agricultural under process of rapid industrialization by imported capital; her prices have been very buoyant. In the United States the process of industrialization has, likewise, been exceedingly rapid since the beginning of the century. When therefore it is stated that of the great export of capital from Great Britain above described, a full quarter has been poured into Canada alone, making her second only to the United States as the field of British investments abroad, (the United States, Argentina, Brazil and India, being the countries next in order affected) and there devoted to a scheme of railway, municipal and industrial development on a scale without parallel in her previous experience, and without parallel relatively in any other country, it will not be matter for surprise if in Canada is seen in maximum intensity the phenomenon always associated in an outstanding way with such a process, namely, a great rise in prices. This, to repeat, is for the simple reason that upon the regions contiguous to areas under rapid development in this manner naturally falls the chief share in providing labour and materials for creating the new railways, towns, elevators, agricultural implements, etc., etc., which a process of the kind makes necessary.

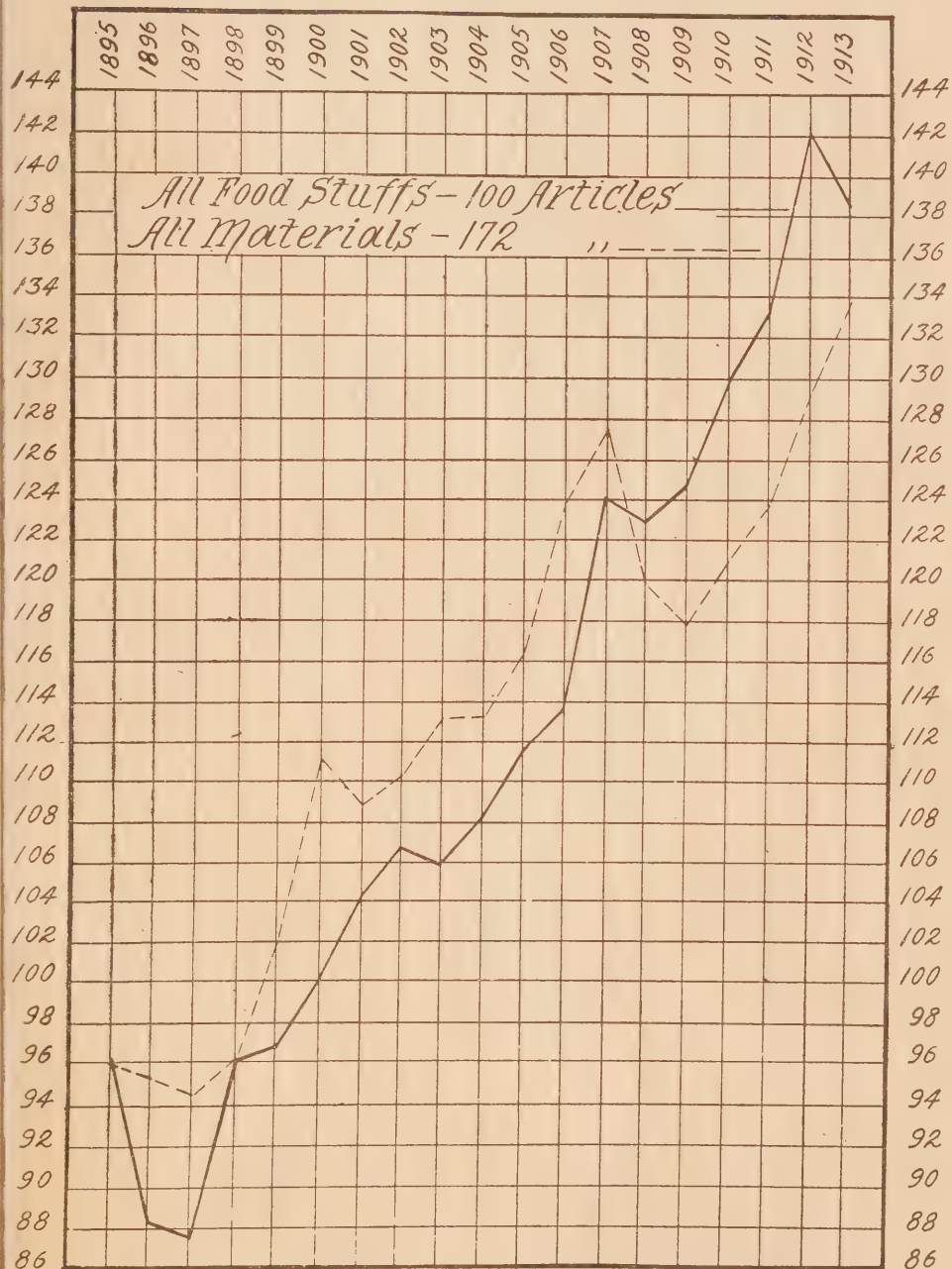
It is at this point that the variation in the trend of food prices as between the old and new countries obtains the significance above remarked upon as connecting the price rise with the expansion. (Note in this connection the diagrams on the three next following pages.) A movement of the kind described produces at first a keen demand for materials and tends to send their prices up. At the same time, however, it exercises so powerful a disturbing influence upon settled occupations—chief among which is the occupation of food production—that the consequent diminution in supply causes in the end a rise in the price of foods greater than the rise in materials. Materials are obtained as a rule over wider areas than foods; they lend themselves more readily to transportation, and their prices tend to move together as between country and country to an extent that is not true of foods, many of which are necessarily drawn from

\*The figures of new railway mileage since 1900 by countries, are: United States, 71,666; Canada, 18,343; India, 11,664; Argentina, 13,588; Australia, 7,469; Russia, 17,377.

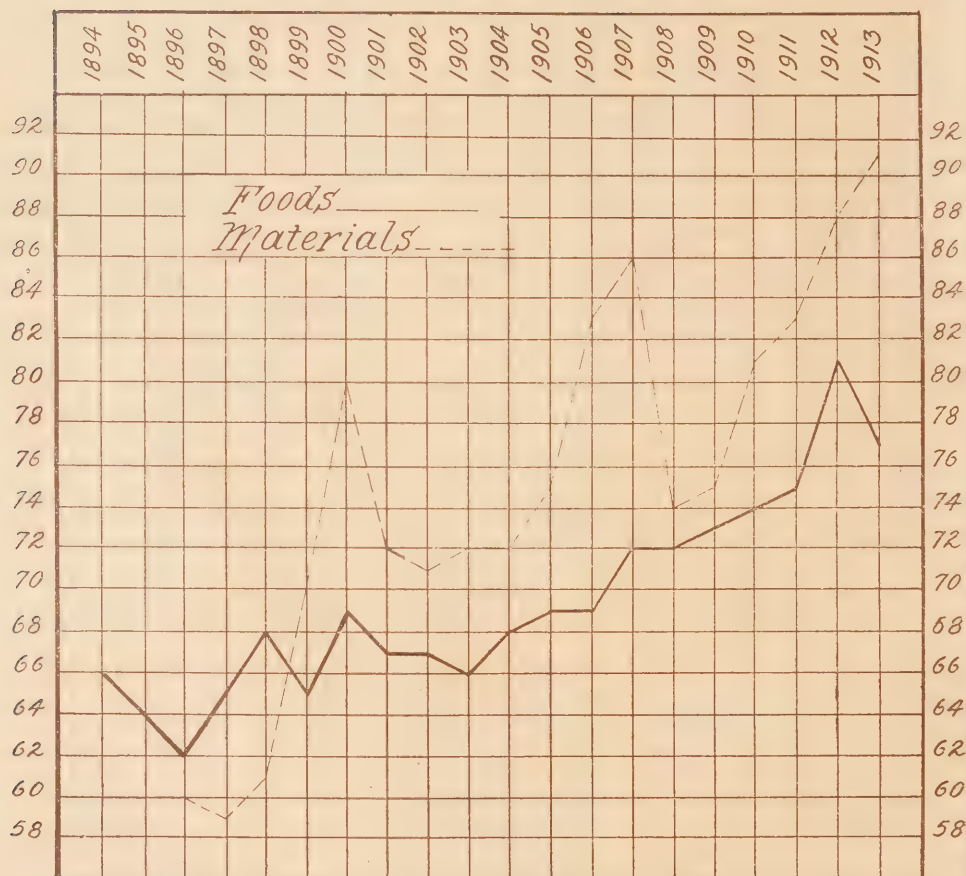
It is interesting to recall the experience of the early 70's which witnessed extraordinary activity in railway-building. The period, as already stated, was one of extraordinarily high prices, culminating in the panic of 1873. In the United States the length of the entire railway system had been doubled in the seven years preceding 1873; in Russia practically an entire system of 12,000 miles was created between 1868 and 1873; in Austria about 4,000 had been built; while Brazil, Chili, the River Plate Republics and Peru carried out extensive programmes. The last mentioned country alone had spent \$120,000,000 on railways. "Peru", says Sir Robert Giffen, writing during the ensuing depression (*Essays in Finance*, 1st Series) "has indulged a fancy for railroad-making, at frightful cost, with the immediate consequence of causing a factitious prosperity while the construction of the railways was in progress, to be changed for the present adversity, when the railways made at such great cost are found unproductive."



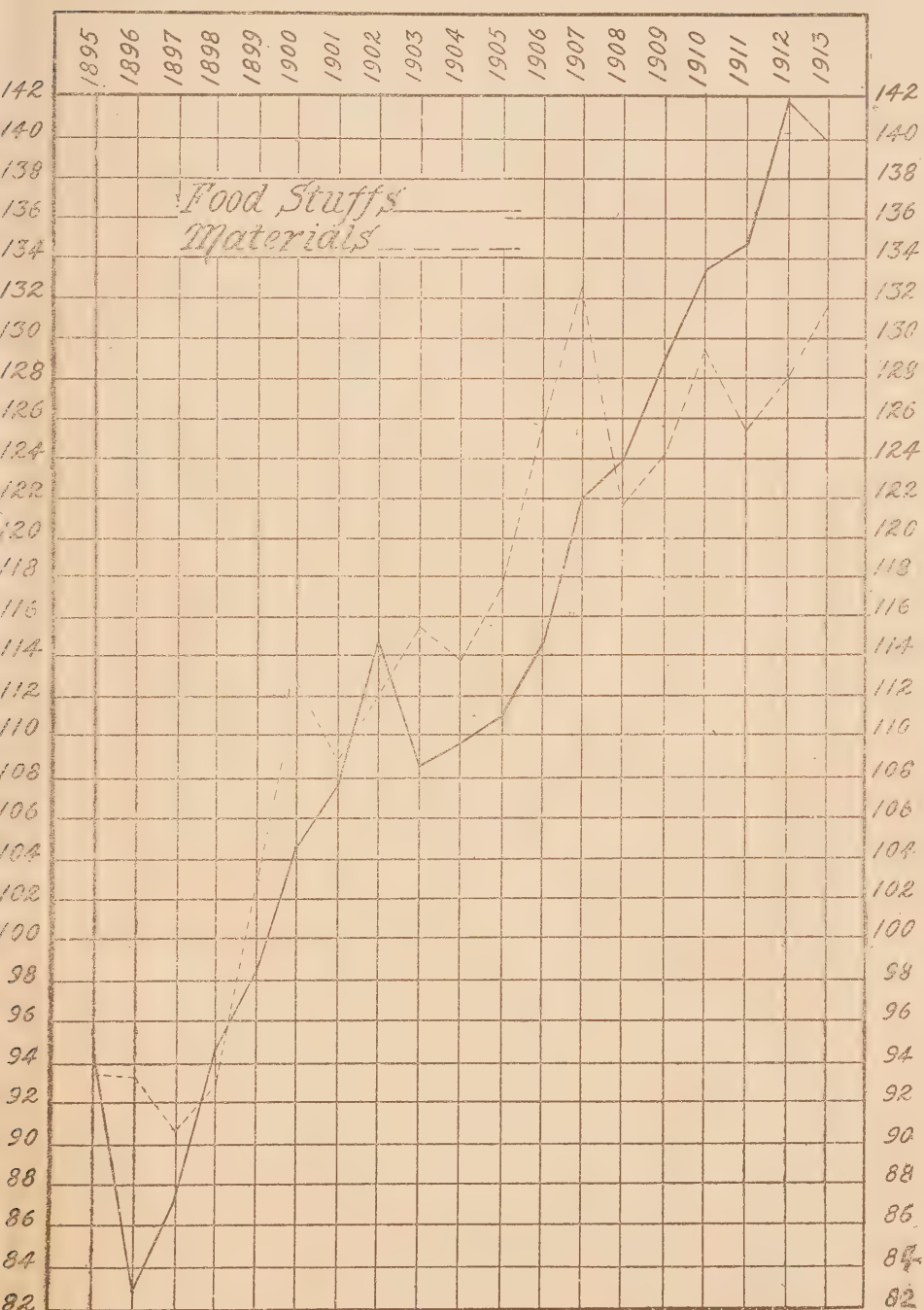
## PRICES OF FOODS AND MATERIALS IN CANADA, 1895-1913.



PRICES OF FOODS AND MATERIALS IN GREAT BRITAIN, 1894-1913.



## PRICES OF FOODS AND MATERIALS IN THE UNITED STATES, 1895-1913.





nearby sources. Foods can be much less quickly reproduced—cereals, fruits, vegetables, not before the next harvest, meats not for an even longer period—and when the area within which supplies are obtained is enlarged, new distribution costs of a serious nature are incurred and prices rise accordingly. It has already been pointed out that the rise in the most buoyant countries is essentially a food rise, and that the most buoyant countries are those in which expansion has been most marked. The relationship is complex and will be illustrated in detail further on, when distribution is more fully discussed. Here, it is sufficient to point out that the figures of world production of the past few years assembled in the inquiry bear out the general analysis. Coal and iron, the fundamentals of industrialism, have increased in their production 75 per cent since 1900: the pig-iron test of “prosperity” is unmistakable. Materials in general have shown the same tendency. Copper production has doubled; manganese production has increased 70 per cent, and spelter perhaps more; minerals as a whole are up 60 per cent. Among textiles, cotton, flax fibre, and jute have increased very rapidly, though wool and hemp have been stationary. But in foods the showing is very different. Cereal production (wheat, oats, corn, rye, barley and rice) it is true, has increased, say, 35 per cent, or half the increase of coal and iron, as a result of the new areas which have come under crops—a result it may be added which has checked the price rise in wheat, oats, barley and the like. Sugar has increased somewhat less (30 per cent). Potatoes are very variable; the 1911 crop was below that of 1900, the 1912 crop was 23 per cent above. The supply of meats, the second great division of human foods, has actually declined relatively to the numbers of the human family since 1900. Wine, hops and tobacco have fallen off.

### Business Cycles.

Interacting with the above is the tendency of trade and industry to run in more or less well defined cycles of prosperity and depression. The causes of this striking fact—“the most important perhaps in the whole of modern industrial life”<sup>\*</sup>—cannot be discussed here; its existence, however, must be admitted and with it the explanation of a similar wave-like movement in the course of prices.<sup>†</sup> The period contains one very pronounced “crisis”, that of 1907, and two lesser ones, in 1900 and 1903-1904 respectively. How prices were influenced may be seen from a glance at the various charts in Part I. It will be noticed, for example, in the chart of wholesale prices in Canada, 1890-1913, (printed as frontispiece), that Canadian prices reacted considerably to the crisis of 1907, slightly to that of 1900 which was European in origin, and little, if at all, to that of 1903-1904—the so-called “rich man’s panic” of the United States. The general recession in 1913 is no less apparent though no crisis has supervened.

### The Increase in Gold Production.

The above brief analysis of the general situation leaves one factor in abeyance—gold. It is an old and orthodox view that the general level of prices is the result of a balance between the total amount of money and the total amount of

<sup>\*</sup>W. J. Ashley, *The Rise in Prices and the Cost of Living*.

<sup>†</sup>“Beveridge ascribes crises to industrial competition; May to the disproportion between the increase in wages and in productivity; Hobson to over-saving; Aftalion to the diminishing marginal utility of an increasing supply of commodities; Bouniatian to over-capitalization; Spietholl to over-production of industrial equipment, and under-production of complementary goods; Hull to high cost of construction; Lescure to declining prospects of profits; Veblen to a discrepancy between anticipated profits and current capitalization; Sombart to the unlike rhythm of production in the inorganic and organic realms; Carver to the dissimilar price fluctuations of producers’ and consumers’ goods; Fisher to the slowness with which interest rates are adjusted to changes in the price level. One seeking to understand the recurrent ebb and flow of economic activity characteristic of the present day finds these numerous explanations both suggestive and perplexing. All are plausible, but which is valid? None necessarily excludes all others, but which is the most important each may account for certain phenomena, does any one account for all the phenomena? Or can these rival explanations be combined in such a fashion as to make a consistent theory which is wholly adequate.”—Mitchell, *Business Cycles*, page 19. Mitchell’s own theory has been called the “synthetic” theory because it combines various points in the older theories. An account of the various crises of the Nineteenth Century is given in a note to the *Historical Sketch of Prices* in Part II.

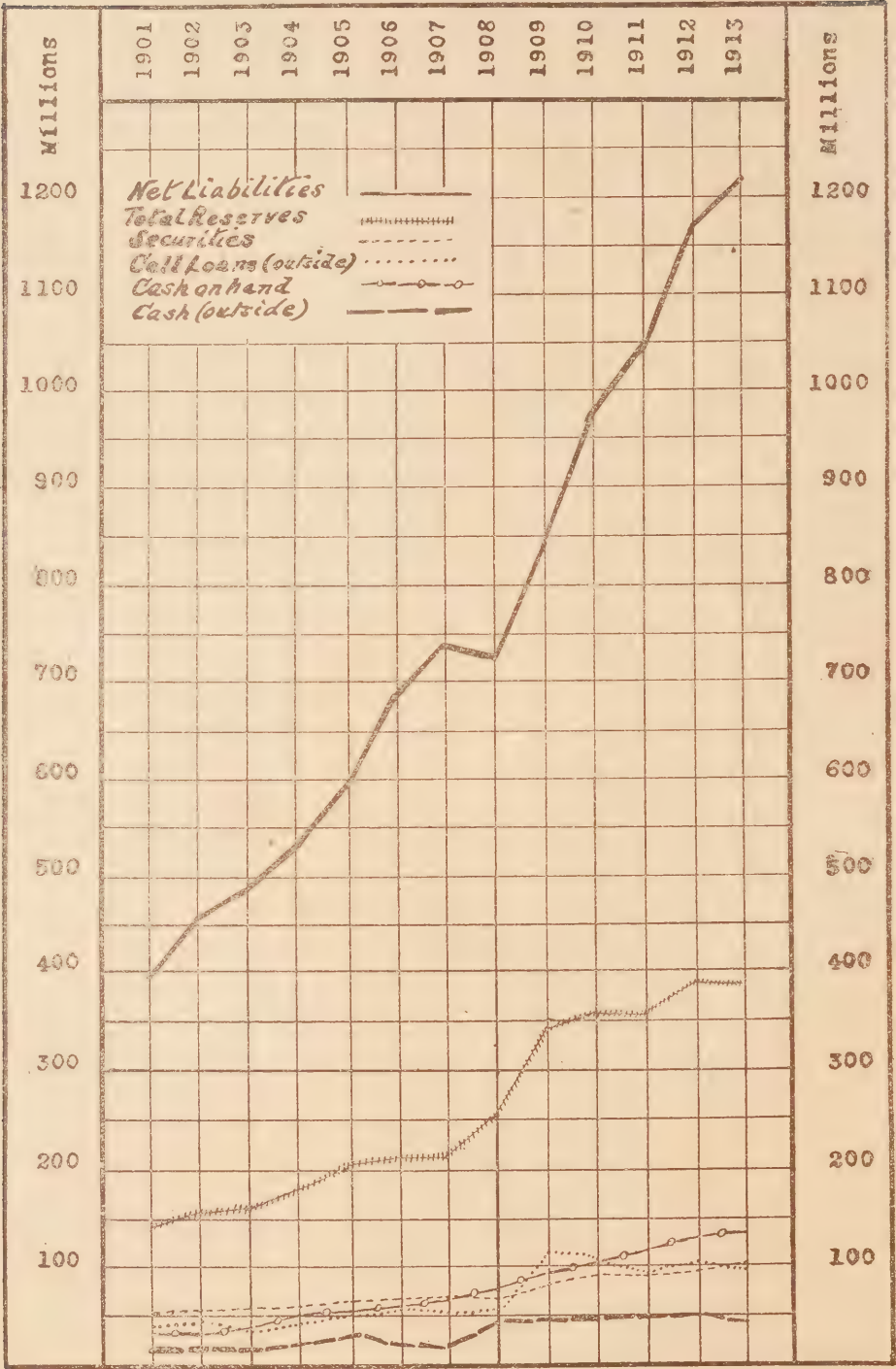
commodities—or rather between the amount of the medium of exchange (taking into account its rapidity of circulation) and the number and magnitude of the transactions it is called upon to effect,—and that a great increase in the gold supply, through its influence on credits, sets in motion an industrial and trade boom precisely of the kind above described. Since the year 1890 the annual production of gold—the standard “money metal” of practically the entire civilized world—has gone up from about 113 millions to about 460 millions, or nearly four times, (the result of the discovery of the cyanide process and its application chiefly in South Africa) with the result that the total accumulated stocks of gold available for monetary purposes have considerably more than doubled. This, as has been well said, “almost bludgeons the understanding” into the belief that we have here the underlying cause of the rise in world prices—especially in view of the similar experience after the Australian and Californian discoveries and on other occasions.

Passing over the fact that the volume of transactions has also enormously increased, which would mitigate if not offset the gold increase: there is keen debate as to the nature of the connection under modern conditions between the gold supply and prices. Gold no longer operates on prices as it once did through the currency alone\*; by the modern organization of credit, 95 per cent of wholesale trade is effected without recourse to the currency at all, but by means of credit instruments. Any disturbance, due to monetary conditions, of the equilibrium between the aggregate volume of transactions and the aggregate amount of the medium of exchange is therefore overwhelmingly likely to come into play through the amount of cheques, drafts, bank notes, and similar documents which have so largely displaced currency. The question accordingly hinges on whether the volume of these documents is governed by the gold supply. It is held on the one hand that the relation is definite—that credit is proportioned to gold reserves. When an increase in the gold supply occurs, prices rise because the new gold flows into reserves thereby creating an expansion of credits and initiating a speculative and trade boom. To this, however, it is objected that credit is not “created” in any such way;—that the primary “creative” force of credit is business sentiment and its power to induce the business community to bring forward their assets as pledge for accommodation. Gold, of course, is indispensable for the “manufacture” of credit; no banker could make a loan even to the most unexceptional customer against the most unexceptional security overwhelmingly in excess of his reserve. But the gold is mere machinery; when it is wanted in such a case it will be sought; when it is not wanted its presence in reserves will not in itself expand credit,—except to the extent that favourable conditions are always stimulating by reaction. Thus credit is based on goods, not gold, and the modern process of buying and selling by means of credit documents becomes, fundamentally, a process of bartering goods for goods, not goods for gold. In any event, the tie between reserves and credit is rendered so elastic by the operation of business sentiment that no definite ratio can be predicated. It is, of course, admitted that an increase in gold production by adding to the world’s wealth may easily become the basis of a boom, just as a heavy wheat or cotton crop produces the same result, but this is to regard gold *quasi* wealth and not *quasi* medium of exchange.

With regard to conditions during the past twenty years, undoubtedly the predominant factor, as already remarked in passing, has been the enormous expansion of credit. The “money increase” of the world has been in the form of credit instruments. Can this be directly ascribed to the increased production of the monetary standard? It may be noted that the new gold in so far as it has been applied to monetary uses has gone preponderatingly into bank and treasury reserves; according to the records of the United States Mint the proportion between the additions to reserves and the additions to circulation has been as 6 or 7 to 1. Thus, of the six billions of gold produced between 1890 and 1910, about a billion

\*In the Sixteenth Century the great rise in prices can be directly associated with the American discoveries.

CANADIAN BANK RESERVES AND LIABILITIES, 1901-1913.





and a half were consumed in the industrial arts, another six hundred millions were absorbed in the hoards of the Orient, while of the remainder not more than half a billion can be traced to the currency, leaving well over three billions as the amount applied to bank and treasury purposes. But, as already explained, this is not to say that the new gold was the primary force creating the accompanying credit expansion. In fact the outstanding feature of the financial history of the past quarter century has been the marked extension of banking and financial organization (including international organization) by way of increasing enormously the facilities for the manufacture of credit by the pledging of securities, and of diminishing the dependence of credit upon gold. Modern business has more and more taken the form of joint stock enterprises whereby the aggregate assets available as security for bank credit have been very greatly increased, and in this perhaps as well as in the gold supply lies the root of the great growth of credits.\* It is significant that England, which as above remarked has financed the greater share of the expansion in the newer sections of the world since 1900, has added but little to her gold reserves,—less in fact than countries like the Balkan States and Turkey which have recently absorbed considerable quantities of gold in the more or less mechanical process of reorganizing their banking and monetary systems.

Turning more particularly to the Canadian situation since 1900, an exceedingly rapid increase in the monetary supply has taken place. The amount of currency in circulation (notes, silver and bronze) has been shown by the investigation to have increased by  $2\frac{1}{2}$  times between 1900 and 1913. The Canadian gold reserve increased by nearly six times in the same period, the most rapid rate of increase in any country in the world, while even the absolute increase falls short only of great countries like the United States, France, Russia and Italy. Similarly, the loans and discounts of Canadian financial institutions went up more in proportion than those of any other country. From a rough calculation based on the latter and on the records of bank clearings, it would appear that the volume of payments effected by credit instruments increased by five times. The rapidity of circulation both of the currency and of instruments of credit undoubtedly increased considerably. Altogether the efficiency of the medium of exchange in Canada would appear to have increased by probably six times since the year 1900, an increase which is certainly very great—probably without parallel elsewhere. The question is, may this be held to account for the pronounced rise in Canadian prices?

The problem is abstruse and technical to a degree and for that reason has been given an entire section of four chapters in the memorandum, where the reader may find the data for judgment. It seems clear that, even if it be granted that the Canadian price-rise is immediately or technically a reflection of the large addition to the monetary supply, the gold increase cannot be regarded as the basic cause. The circumstance which chiefly argues against that conclusion is that Canada has no gold market and that gold for monetary purposes—that is, for reserves, the only monetary use to which gold is put in Canada—flows hither only in response to definite business demand. The mechanism of the Canadian monetary system described in Part II, renders it plain that there is no native reserve of gold in Canada, and hence no opportunity for a boom to be initiated by gold. The enlarged Canadian reserve (which until 1914 was in coined gold, Dominion notes being redeemable “in specie”) is not the fundamental cause of the recent expansion in credits and of the railway and industrial boom in Canada—rather the opposite is the case. The fundamental cause is the heavy borrowings of Canadian enterprises abroad for the development purposes in question. In other words the new credit had its origin elsewhere and it was its introduction into Canada that necessitated the expansion of reserves, currency and other financial apparatus, just as it led to a growth in the number of

\*The proportion of specie used in the movement of accounts at the Bank of France, one of the most conservative of banking institutions, was 3.22 per cent in 1900, and 1.95 in 1910.

Canadian branch banks from 708 to 3,140 in the thirteen years 1900-1913. It was noted above that in the United Kingdom, whence came practically the whole supply of credit which financed the Canadian expansion, there has been little or no addition to gold reserves since 1900. It may be added here that in the countries to which British capital on so large a scale has flowed (Canada, Australia, South America) a marked increase in the gold supply has taken place. In other words, the gold accretion seems to take place where loans are expended and financed (England financed her enormous loans to Canada largely through the United States) not where they originate.

But the primary purpose of this memorandum is to seek an explanation why prices have risen higher in Canada than in other countries like England and France. As above stated, the increased Canadian gold supply would not appear to have entered into that difference as a *primary* factor, seeing that it has been brought here largely because we have sought and obtained a plentiful supply of long-time credit abroad—the latter a product largely of reorganized financial apparatus. That the increased gold production, however, facilitated this movement, and that its effect has been to assist materially in the enlargement of world credits and in one way and another to stimulate the world-buoyancy, may be accepted.

### The Situation in Canada.

With this by way of general statement, let us turn to a more detailed examination of how in the case of Canada the situation has worked itself out.

At bottom, the phenomenon we have to examine is the drawing of Canada at an exceedingly rapid pace into the world-trade scheme as a source of supply for raw materials, particularly cereals. This is the economic impulse underlying what is popularly called the Discovery of the Last Best West. Around this hinges the general scheme of economic progress in Canada during the last twelve years, and in its various manifestations are to be sought perhaps three-fourths of the explanation of the course that has been followed by prices.

The superficial phenomena are familiar enough. A spirited immigration policy drew thousands of people to the country, primarily to occupy the new lands. An immense railway and town-building programme was begun, also for the service of the West. The work of locating settlers, providing lumber for their houses, agricultural machinery for their fields, elevators for their crops, drew the entire economic life of Canada out of its accustomed orbit to a greater or less degree. The East in particular turned to industrialism, the people flocking from the farms to the centres of secondary production and distribution, whither also a considerable portion even of the immigrant tide was diverted. In earlier times, before western wheat growing had assumed the lead in Canadian agriculture, the smaller Canadian towns and cities were supplied from the adjacent country. Once, however, the above change took place,—and while it was taking place—they were compelled to go further afield for their supplies. New freights and the various other expenses incidental to distribution over a wide area accordingly began to appear as charges in the food bill, at the same time that Canada began to be drawn upon more and more by world markets as a source of supply. Concurrently the familiar features of an intense speculative boom, especially in land, added their demoralizing influence. That several other countries, like the United States, Argentina, Brazil, and Australia, witnessed developments similar in kind if not in degree, would account for some intensification of effects locally. It will be well to set out the facts of the situation in the usual order of economic analysis, beginning with the agencies of production, (1), capital, and (2), labour,—their growth and distribution since 1900; passing on to (3), production; and thence, (4), to the distribution problem as affected by the preceding; concluding with, (5), a review of the consumption

or living standards of the people. Each of these analyses will throw its own light on the situation and we may thus locate from several points of view the development that explains the action of prices.

### (1) The Growth and Distribution of Capital, 1900-1914.

In a new country like Canada additions to capital come chiefly from abroad. It has been already noted that since 1907 Canada has received approximately one-quarter of the entire capital-export of the British Isles. The usual method of estimating the extent of such a movement is by the statistics of external trade. The new capital did not enter in the form of gold, and as exchange rates have been uniformly in favour of Canada it must have come in the form of goods.\*

The gross export and import totals, however, cannot be used in a calculation of this kind, both including several items which in no way reflect borrowings. For example, export trade covers interest and dividend payments abroad, remittances of gratuities by alien residents, expenditures of Canadian travellers abroad, payments to foreign shipping companies, etc., while imports cover items like capital brought in by immigrants, expenditures of tourists, remittances from foreign countries, etc. The striking of the trade balance eliminates these and similar items in order to arrive at borrowings is accordingly a somewhat elaborate calculation, especially in view of the paucity of Canadian statistics on certain points. It has, however, been carried out with care in the investigation and the result is offered as a close approximation. That result shows that Canada has borrowed from foreign countries since 1900 something between \$2,700 and \$2,800 millions.

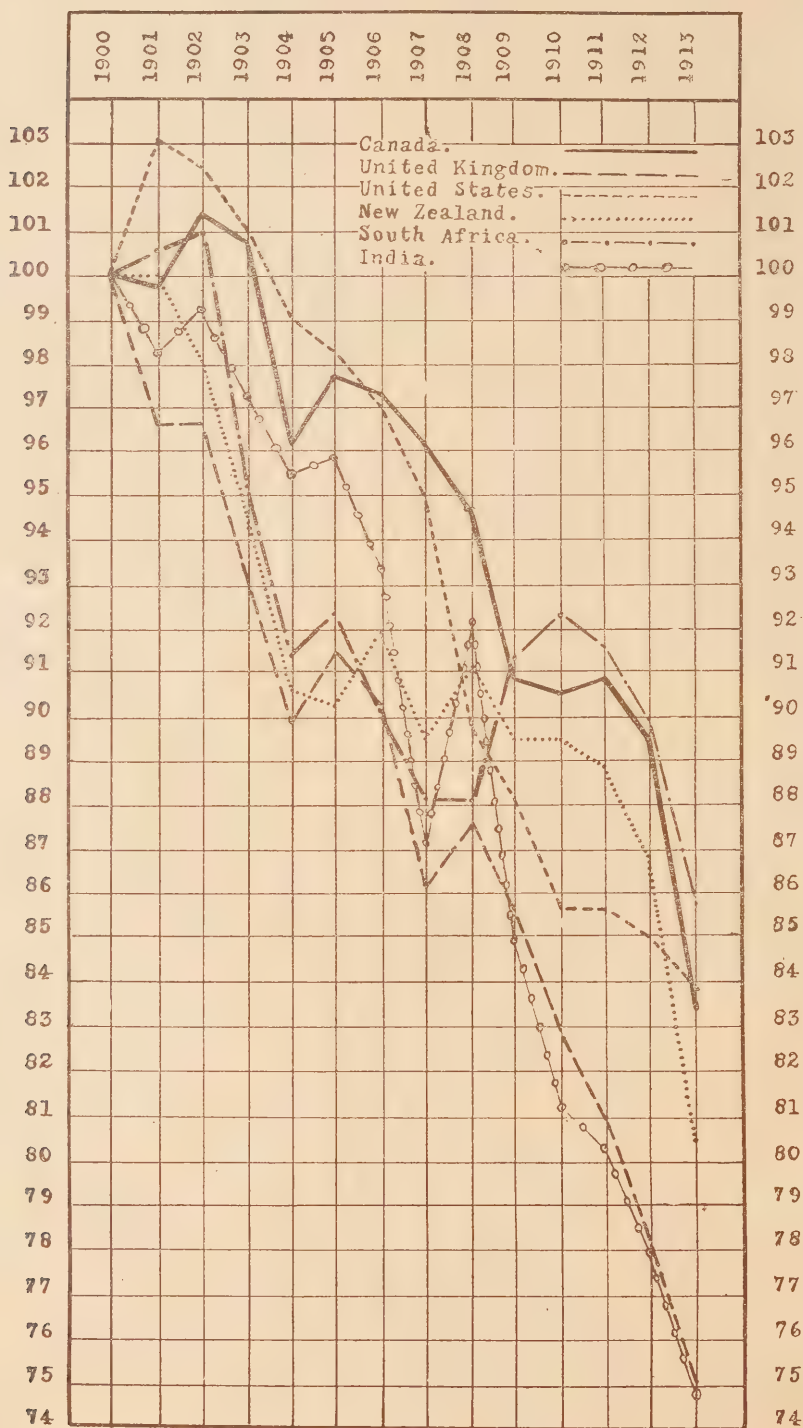
While this method is undoubtedly the most comprehensive for estimating the sum total of our borrowings abroad, specific records of capital movements are also valuable, both as confirming the amount and as illustrating sources. Four such records of Canadian borrowings are available. Mr. F. W. Field, Editor of the *Monetary Times*, has estimated the various public loans of the country abroad from 1905 to 1913 as \$1,462 millions from Great Britain, \$636 millions from the United States, and \$178 millions from other countries. Mr. E. R. Wood, President of the Dominion Securities Corporation, in a comprehensive record of Canadian bond issues from year to year since 1907, shows that of a total of \$1,508 millions borrowed on bonds, \$1,142 millions were obtained in England and \$116 millions in the United States. Sir Frederick Williams-Taylor, General Manager of the Bank of Montreal, has estimated that British loans to Canada increased between 1902 and 1914 by \$1,700 millions. The estimate of Sir George Paish, already quoted, shows British loans to Canada of \$1,500 millions between 1907 and 1913. These records in conjunction account for about \$2,300 millions of Canadian public borrowings abroad since the opening years of the century. The balance between this and the total shown by the trade figures is made up by private loans, express money orders, and minor items.

Foreign borrowings, of course, do not represent the entire accretion to Canadian working capital. Domestic savings doubtless amounted to several

\*Trade statistics must, of course, be interpreted in the light of common knowledge as to the nature of the capital movement they represent. In the case of Great Britain the excess of imports over exports represents payments of interest and dividends on sums invested abroad. As above stated, however, an excess of imports over exports in new countries like Argentina, Australia and Canada must be regarded as due to borrowings from the older countries. The normal condition of debtor nations is to have an excess of exports, representing interest payments on loans. During the process of borrowing, however, —while the capital sum is passing from the one country to the other—this is reversed. It does not follow, of course, that the excess imports must be from the country from which the capital is derived. This is a matter of international trade arrangements in general. Canada's recent borrowings from Great Britain, for example, as Dr. Bonar has pointed out, have entered the country in the form of goods bought in the United States. The latter country owes large sums to the United Kingdom annually in interest payments, and has been paying them of late by remittances of goods, on Great Britain's account, to Canada.



PRICES OF LEADING GOVERNMENT BONDS, ILLUSTRATING CONDITIONS IN THE  
MONEY MARKET, 1900-1913.  
(Prices in 1900 = 100).



hundred millions, though it may be remarked that in many cases these savings represent the result of the capital import movement and are merely that capital in another form.\* There have been, however, considerable additions to capital that are fundamentally domestic in origin. About \$250 millions of bonds have been subscribed for in Canada, according to Mr. Wood's record, since 1908 alone. It would seem safe to say that Canada's working capital, what with foreign borrowings and domestic savings, has grown by \$3,000 millions since 1900.

But the distribution even more than the extent of the new capital is important here. The records of loans just mentioned throw a valuable preliminary light on this point. All agree in showing that railway demands have been far and away the chief factor, those of government and municipalities standing second, industrial enterprises third, land and lumber companies next, and mining companies next. Of \$1,700 millions borrowed in England which the records cover, \$700 millions went into railways, \$500 millions into government and municipal loans, and \$300 millions into industrial and mining concerns. The \$600 or \$700 millions raised in the United States has gone largely into industrial enterprises. Little of the new capital, it will be seen, has been directly devoted to food-production.

The final word on the capital trend, however, is that of the census and similar statistical agencies. It will be interesting to review the various industries in order, noting the additions made to capital equipment in each since 1900. In an estimate of this kind it is incumbent to place the calculation on a "real" basis, that is, to discount changes that may be due merely to prices and values. The term "capital" is, of course, interpreted broadly as including everything of the essential nature of "equipment."

*Agriculture.*—The value of Canadian agricultural capital increased according to the Census 136.4 per cent between 1900 and 1910. Omitting land values the gain is only 118.6 per cent. On a quantitative basis, however, these estimates are markedly reduced. The acreage of improved lands has increased only 60.8 per cent, and the total number of live stock on farms only 55.7 per cent. Equipment like implements and elevator capacity has increased faster, namely 125 per cent and 450 per cent respectively, though farm buildings show only a 40 per cent increase. The "real" increase in agricultural capital may be set down at 63 per cent. The Western Provinces, of course, have been the scene of practically the entire advance. In Saskatchewan, Alberta and Manitoba, increases in improved acreage have been 957, 816 and 69 per cent respectively, Quebec standing next with only 9 per cent, Prince Edward Island with 5.9 per cent, and the other provinces stationary.

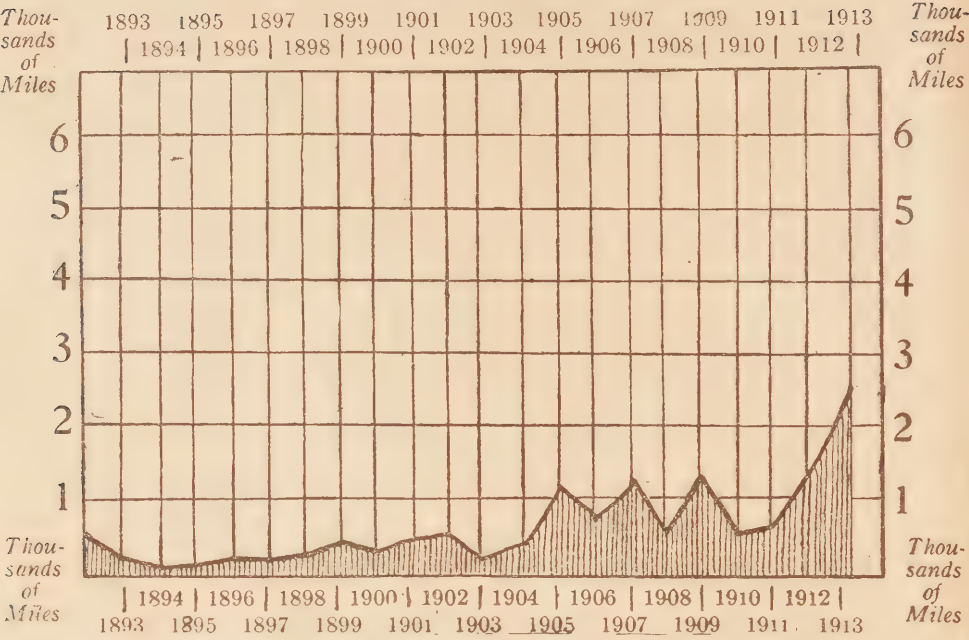
*Fishing.*—The number of boats decreased by 11 per cent and the tonnage of vessels by 6 per cent. The value of capital equipment increased 120 per cent, but it would be necessary to discount this considerably on a "real" basis, notwithstanding the improvement of the average boat and vessel.

*Mining.*—The number of plants increased 61.8 per cent and the effective equipment of the industry by about 100 per cent.

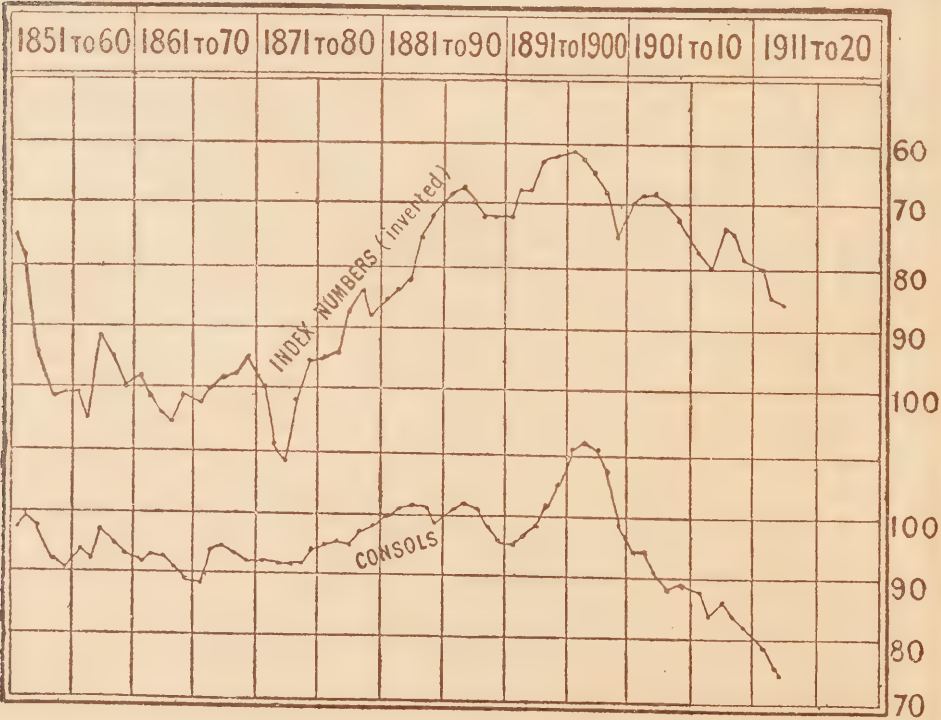
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\*For example, the great rise in the national revenue derived from customs duties is, when the additional imports represent borrowings, merely a diversion of a part of those borrowings to the national treasury. When such revenue is expended on capital account it is therefore not an addition to, but only a part of, the capital coming in from abroad. Large profits have been made in recent years by financial institutions and others in handling Canada's foreign loans and the activities contingent thereon. The point to be remembered of such profits is that they are not based on increased productivity within the country and are therefore to a degree artificial, disappearing when the capital flow which created them ceases. The savings of a brakeman engaged in Canada because of the increased haulage of materials caused by the construction of the G. T. Pacific are merely a part of the loan floated in London by that corporation for the construction of its road. If, however, the additional brakeman was required because of increased traffic created by a growth in Canadian production, his savings are part of an addition to national capital created by the country itself.

THE NEW RAILWAY MILEAGE IN CANADA



THE RELATIONS OF PRICES OF COMMODITIES AND PRICES OF BONDS.





*Manufacturing.*—Passing to industries of “secondary” production, the gains at once begin to mount. The working capital of manufacturing establishments increased 107.5 per cent, and the value of lands, buildings and plants 212.7 per cent, the latter representing a gain of at least 150 per cent on a “real” basis. It is noteworthy that the chief advances in capitalization have been in industries engaged in the manufacture of building materials, iron and steel, various metal products, and transportation equipment; these have been increased by 200 per cent and upward. On the other hand textile industries have only increased 79.5 per cent and food producing industries by only 132.7 per cent, the latter dwindling from 12.8 per cent of the entire manufacturing capitalization of 1900 to 10.6 per cent in 1910. Ontario and Quebec have received 70 per cent of the new manufacturing capital.

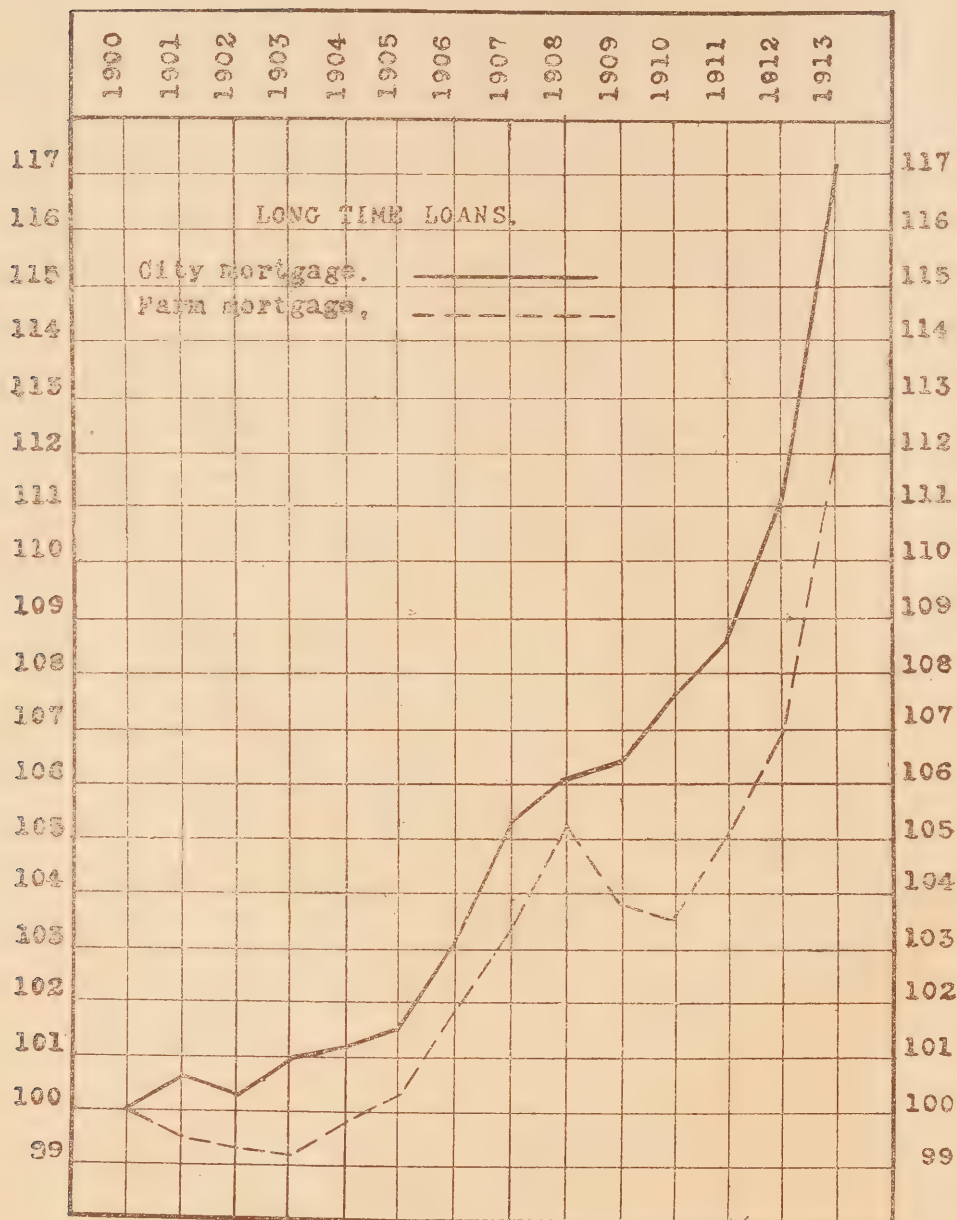
*Railways.*—The railway record is, of course, still higher. Capital liabilities show a gain of \$750 millions or 95 per cent, but the total new expenditures amount to close upon a billion and a quarter. In no other direction have expenditures been on an equal scale. The additional mileage has been the most noteworthy item. The increase was over 11,000 miles, with at least 7,500 miles additional in process of completion. Meanwhile the number of locomotives has increased 121 per cent, the number of freight cars 171.5 per cent, the number of cabooses 173 per cent, and the number of passenger and baggage cars about 80 per cent—and these figures do not reflect the large increase that has taken place in the capacity of the individual locomotive and car.

*Municipal Expansion.*—The houses, streets, sidewalks, water and sewerage systems, etc., of towns and cities are, of course, a part of the nation’s capital equipment. It is difficult to measure the growth that has taken place. As we have seen, municipal borrowings in the past five years alone have amounted to \$330 millions. Real property assessments, which may be regarded as the security for such borrowings and as representing the values which the municipalities attach to themselves as “going concerns,” have increased for 140 localities by five times since 1900,—namely, from \$377 millions to \$1,895 millions. This to a considerable degree represents increased price of property sites for manufacturing, trading, and residential purposes. Moreover, the average municipal tax rate has increased 21 per cent—this, in view of the usual stability of such rates, being a very strong indication of the increased scale of municipal expenditures on capital improvements and the general feeling of optimism begotten by civic growth.

The Department of Labour record of building permits from 1905 to 1913 shows an expenditure of nearly a billion on new buildings. This, of course, includes industrial plants already mentioned (say \$250 millions) as well as the rise in values; on the other hand, it covers less than 100 localities, and shows that the amount of building in progress was over three times as great in 1913 as in 1904. The census shows that the number of dwellings in Canada increased 37.6 per cent between 1900 and 1910.

In such figures as the above may be seen a cause as well as an effect of the real estate boom which has absorbed so much capital and energy in Canada since the opening of the century. Having its beginning in the agricultural extensions of the West, it reached its chief intensity in the cities where the resulting industrialization was most immediate and rapid. The Eastern as well as the Western cities came under the influence. In the cities themselves the chief increase in values took place in the central business sections and in the outlying suburban sections, the former representing increased effectiveness for business purposes, and the latter a similar increase for residential purposes. The investigation into rents throws light on this aspect. Rents of stores in first class business sections of the larger cities have trebled since 1900 and those of stores in

THE RATE OF INTEREST IN CANADA, 1900-1913.



second class business sections have gone up only slightly less. Down town office rents have doubled, whilst house rents are up about 60 or 70 per cent. Even with these increases it is a common complaint that the return on valuations is less than in 1900.\*

It is interesting to note in the record of capital-exports from the British Isles, that of the totals loaned to the different countries about the same proportion, namely, one-third, went into railways throughout the list, and that the same similarity of apportionment obtains in the case of Government loans. In the case of municipal borrowings, however, the proportion diverted in Canada is very much higher than in any other country.

*Government Expenditures.*—Government expenditures on capital account (post offices, canals, public works in general) are to a certain extent covered in the above. Their exact amount is difficult to ascertain, but they run into the hundreds of millions.

*Summary.*—Summarizing the above, it would appear that during the decade 1900-1910, (the period for which the estimates can be reassembled on the same basis) the capital equipment of the primary industries of agriculture, fishing and mining increased by \$465 millions, whereas on construction and "secondary" industries (railways, canals, manufactures, municipalities, public works) an expenditure of at least \$1,800 millions was made. In other words the proportion between the two has been as 4 to 1. If the four years 1911 to 1913 were added, with their intensification of the tendency, the proportion would probably be 5 or 6 to 1.

It has been already said that no other country has absorbed outside capital so rapidly as Canada since 1900. This is borne out by an examination of the trade balances of various countries. On a per capita basis the Canadian excess of imports over exports has become the highest in the world, namely, \$42. In 1902 it was only 10 cents, being the lowest of any country having an unfavourable balance at all. The change from the one condition to the other is a measure of the impulse to secure capital abroad for exploiting our natural resources. For a parallel we must turn to the experiences of the United States in the 1880's and of Argentina in the early 1890's, (see diagram over the page) but even these well known instances do not exhibit the same relative intensity of capitalization. In other words, there has been no such instance in modern history of the "speeding up" of industrial expansion.

The keenness of the world-demand for capital is well illustrated by the yields of government bonds. The average yield at current prices of the leading bonds of fifteen nations rose from 3.89 per cent to 4.23 between 1900 and 1913. The Canadian rate on farm mortgages went up by one-eighth and that on city mortgages by one-fifth, chiefly since 1905. In other words, the "price of money" in Canada has gone up 12-20 per cent since 1900 in the case of long-time loans. Call loans were up 15 per cent in 1913, and general banking accommodation, say, 10 per cent.‡

\*The investigation into rents covered all localities of 10,000 population or over. Returns were obtained from three real estate agents in each locality of typical stores and offices in the business section and of a six roomed workingman's dwelling with sanitary conveniences. An independent inquiry by correspondents of the *Labour Gazette* into workmen's rents was also made. Housing conditions in each city are covered in some detail, and notes added on the trend of rents in Great Britain, the United States, France, Germany, Belgium, Australia, New Zealand, South Africa and Argentina.

‡The investigation into interest rates covered loans on city mortgages in every locality of 10,000 or over and loans on farm mortgages by 45 companies doing business in every section of Canada. The Government bonds included are Consols, French Rentes, German 3 per cent, Austrian 4 per cent, Hungarian 4 per cent, United States 4 per cent (1925), Russian 4 per cent, Japan 4 per cent, Chinese 4½ per cent, Indian 3 per cent, South African 3 per cent, New Zealand 3 per cent, Argentine 5 per cent, Brazilian 4 per cent, and Canadian 3 per cent.



(FOREIGN TRADE AND IMMIGRATION, CANADA, THE UNITED STATES  
AND ARGENTINA, 1870-1914).



*Note on Immigration line:*

Canada: Spread is from 25,000 to 400,000. 1900 is for 6 months only.

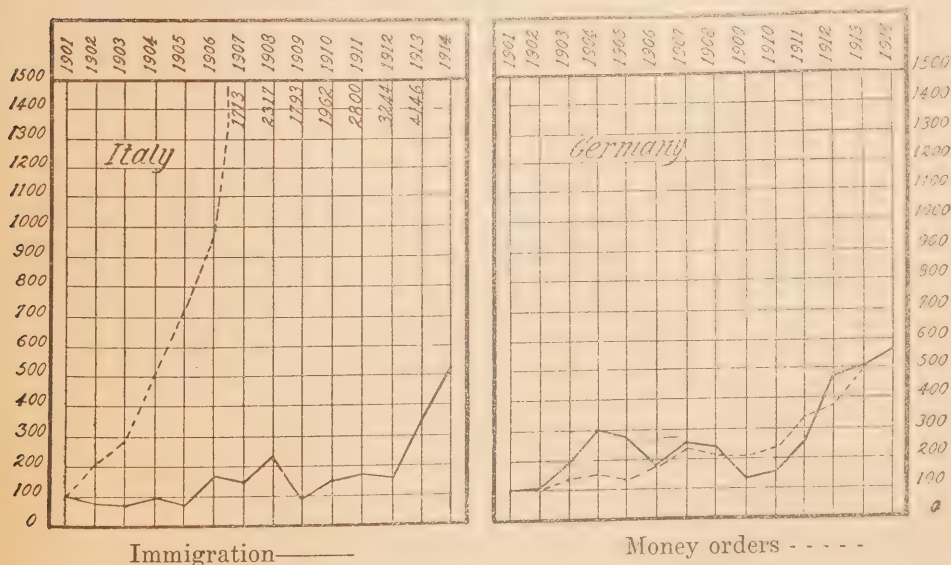
United States: Spread is from 100,000 to 1,300,000.

Argentina: Spread is from 20,000 to 320,000.

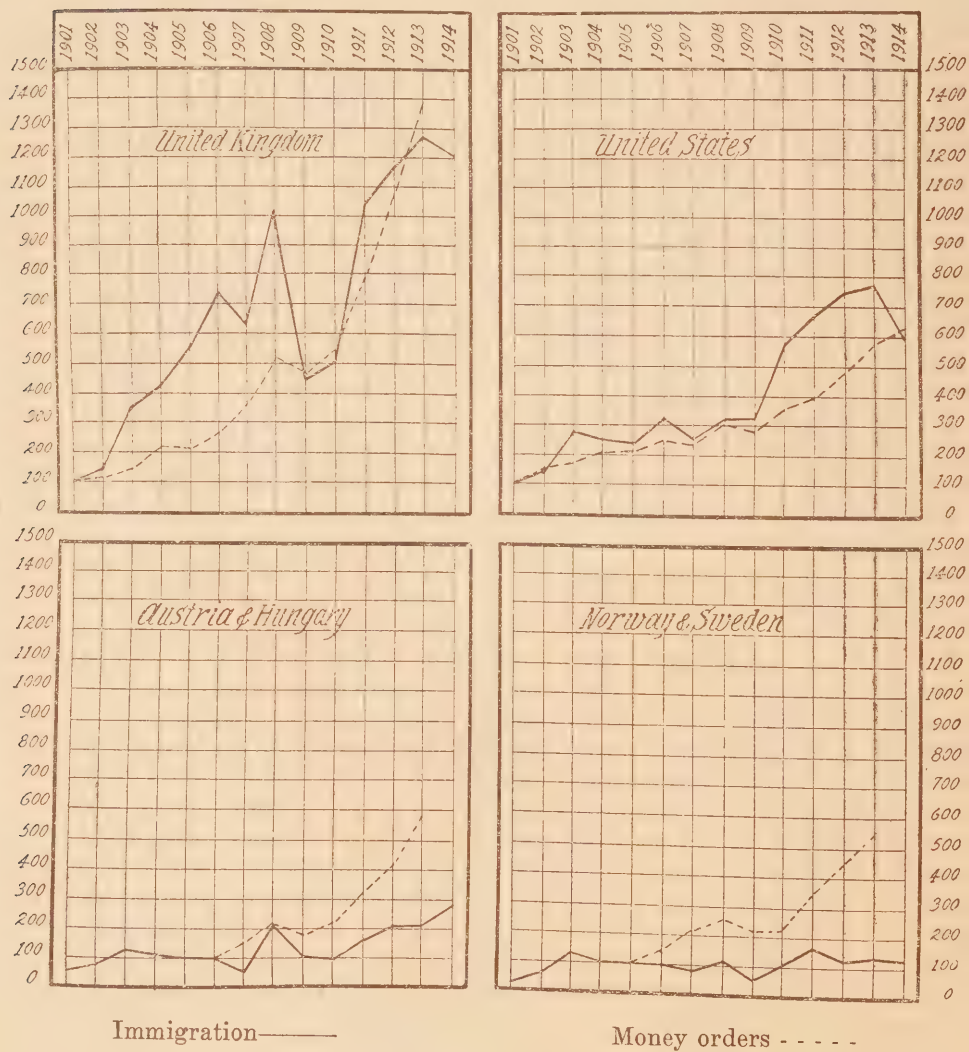
## (2) Labour Force, its Growth and Distribution, 1900-1914.

The second active agent of production, namely, labour, has taken the same direction as the first, and the figures add some interesting light. The most notable fact is perhaps that the permanent labour force of Canada (that is, the population) increased 35 per cent between 1900 and 1910, (45 per cent to 1913). No other country in the world has shown so rapid a growth. Of 18 leading countries for which figures are given, New Zealand comes nearest with a gain of 30 per cent (1900-1910); the United States increased 21 per cent, Russia about the same or perhaps a little more, Australia 18 per cent, Germany 15 per cent, Japan 13 per cent, Argentina 10 per cent, and the United Kingdom 9 per cent. This, however, is not the whole of the Canadian situation. The census figure above cited includes less than 900,000 increase in "foreign born." But in the same decade, 1900-1910, the number of immigrant arrivals was over 1,700,000. Some of these may have passed on at once to the United States or elsewhere, but the great majority probably remained some time in Canada. One indication of this is the exceedingly rapid growth in the volume of money orders sent from Canada to countries like Austria-Hungary, Italy, Norway and Sweden, whence a correspondingly heavy immigration was derived. Money orders sent abroad are largely made up of two items,—payments in small trade transactions, and remittances to relatives or dependants. Our lesser transactions with Great Britain and the United States are in the aggregate considerable; but money orders sent to the countries above mentioned doubtless represent in large part remittances from recent immigrant arrivals to friends at home, made out of wages, and presupposing a term of residence in the country. The conclusion is safe that Canada in addition to the accretion of permanent labour force recorded by the census, received considerable bodies of "floating"

CHART SHOWING IMMIGRATION INTO CANADA AND MONEY ORDERS FROM CANADA ACCORDING TO COUNTRIES FOR FISCAL YEARS.  
(Ending June 30, 1900-1906; March 31, 1907-1914).



CHARTS SHOWING IMMIGRATION INTO CANADA AND MONEY ORDERS FROM CANADA ACCORDING TO COUNTRIES FOR FISCAL YEARS.





labour, and that the final figure of expansion for the 14 year period may be set down at well over 50 per cent.

From a cost of living standpoint, the obvious meaning is a corresponding increase in the demand on the food supply. This, of course, would be met if food production had received a similar impetus. An examination of occupational tendencies, however, since 1900, shows that in so far as labour is concerned the flow has not been in the direction suggested, but rather the opposite. The hundreds of thousands of "temporary" labourers may be almost wholly accredited to the large railway and construction operations. More important is the trend in the ranks of the "permanent" labour force. The food producing industries have, of course, absorbed large numbers; their relative importance, however, as employers of labour, has been declining. In 1901 those engaged in agriculture constituted 39.8 per cent of the total working population; in 1911, they had diminished to 34.3 per cent. In fishing there was a decline from 1.5 to 1.3 per cent of the whole, and within the industry itself there was a movement away from the primary occupation of catching the fish to the secondary occupations of packing and canning. In mining, on the other hand, there was a rise from 2.1 to 2.4 per cent. But it is in transportation lines that the tendency is seen at its highest, the percentage having risen from 4.8 to 9.0. Forestry and lumbering have risen from 2.2 to 4.5 per cent. The trade and merchandising classes have likewise increased in relative importance. In the manufacturing industry, significantly enough, employees on mechanical products and textiles have risen from 6.2 to 7.2 per cent of the whole, but the sections devoted to the manufacture of food and clothing have fallen from 7.4 to 6.9 per cent. For the building trades statistics are not available, but they doubtless absorbed an increased proportion of the working population. Domestic service has declined from 9.3 to 7.9 per cent, a reflection perhaps of the attraction of female labour into industrial occupations. The United States has had the same experience; those in agricultural pursuits have diminished from 35.7 per cent of the whole in 1900 to 32.9 per cent in 1910, while trade and transportation occupations increased from 16.4 to 19.9 per cent and manufacturing from 24.4 to 28.3 per cent.

Figures quite as significant, though less specific, are those of urban and rural increase. The outstanding fact is, of course, that in Canada, an agricultural country, the former has greatly surpassed the latter. Urban growth in fact has considerably more than doubled rural, the city population rising from 38 per cent to 45 per cent of the whole during 1900-1910. This is indeed an extraordinary development in an era primarily devoted to opening a great new territory for agriculture, when it might be thought the building up of towns would follow rather than take the lead. Yet in Saskatchewan and Alberta alone of the provinces has the rural increase been greater than the urban, and even in that centre of agricultural expansion the relative importance of the rural population has dwindled. In the East, of course, where the larger cities are situated and the attraction into industrialism is at its maximum, the rural decline is much more pronounced. The urban growth in point of fact has been pre-eminently a growth of the larger centres. In 1900 Canada had 21 cities of over 10,000 inhabitants aggregating 996,806 in population; in 1910 there were 44 places of 10,000 or more whose total population was over two millions. Twelve per cent of the population in 1900 was contained in cities of over 50,000, whereas in 1910 the percentage had increased to 18. In brief, a full half of the entire urban increase in Canada may be accredited to the ten largest cities. Though the same cityward tendency is seen in other countries, Canada again stands out pre-eminent. Whereas during the last ten years the rise in urban percentage in England and in Norway was one point, in France 2, in Denmark 4, in New Zealand 5, and in Germany and in the United States 6, in Canada the rise as already noted has been 8 points. The explanation is partly psychological in the better

schools, amusements and general satisfactions of the gregarious instinct, but is largely economic, as the analysis under the heading of capital has shown,—a reflection of the great impetus given to construction, manufacturing and distributing activities by the promise of the new West.

The population and immigration figures yield one further analysis which is important in the present connection. They show, of course, that the rate of growth has been greatest in the West. The population of Saskatchewan and Alberta increased over 400 per cent in the decade 1900-1910, British Columbia 119 per cent, and Manitoba 78 per cent. No other province approached these gains, though all except Prince Edward Island have grown. Even considered absolutely the gain west of the Great Lakes has been more than half again as large as in the East. But it is in the source of the western increase that the interest here lies. It is ordinarily attributed to immigration. Yet though the West has received a larger number of immigrants than the East the excess is not striking, namely, 55 per cent of all arrivals to the East's 45 per cent. Ontario and Quebec received practically the same number of immigrants as the Prairie Provinces, and it is to the increase of British Columbia over the Maritime Provinces that the western preponderance is due. Eastern industrialism in other words has absorbed immigration in almost equal measure with Western agriculture. The further element in the situation is the extent to which the West has drawn upon the East itself. From the census it would appear that fully 350,000 Canadians have moved from the East to the West, constituting nearly a quarter of the population gain of the West since 1900. The point to be noted is the disturbance to settled industry, and especially to agriculture, involved in a movement of these proportions within the country. Not only are occupations wholly abandoned in such a process, but even where no change appears on the surface a modification amounting to a change often results. The farmer moving from an Ontario to a Western farm remains a farmer, but he

(THE GROWTH OF URBAN POPULATION, CANADA, 1871-1911.)



represents nevertheless a drift from mixed farming to grain production, and a movement accordingly into a sphere in which a highly organized world-demand rather than the feeding of the local population is the dominant factor.

### (3) Production, 1900-1914.

The results of the capital and labour movement just described are seen in the statistics of production—using the term broadly to include economic activities in general. It will be interesting to measure progress as above by industries, using as in the capital section quantities rather than values where possible, so as to discount changes which merely reflect the rise in prices:

*Agriculture.*—The rise in agricultural production between 1900 and 1910 works out at 36.8 per cent. Except for a gain in Eastern dairy production due to improved methods, the rise has been almost wholly in the new areas of the West. The great rise in cereal production is Western. Cereal production in the East, which was 208 million bushels in 1901, was 201 million bushels in 1911, and Eastern root crops which yielded 126 million bushels in the former year, yielded only 121 million bushels in the latter. Eastern fodder crops, however, have more than doubled. Live stock figures are practically stationary in the East, comparing 1913 with 1900; in the West there was a considerable gain in the opening year of the century, but since 1910 conditions have been stationary in cattle with gains in swine and sheep.\*

*Fishing.*—The value of the annual fishing catch has risen from \$21 millions in 1900 to \$33 millions in 1913, or about 55 per cent, but as prices are up fully 50 per cent, the increase on a quantity basis has been but small. The chief expansion has been in British Columbia, which in 1900 contributed 22 per cent of the total value but in 1913 contributed 43 per cent.

*Hunting and trapping.*—A gain of 35 per cent is estimated.

*Lumbering.*—Forestry products (log products as distinguished from manufactured lumber) show a gain of 54 per cent.

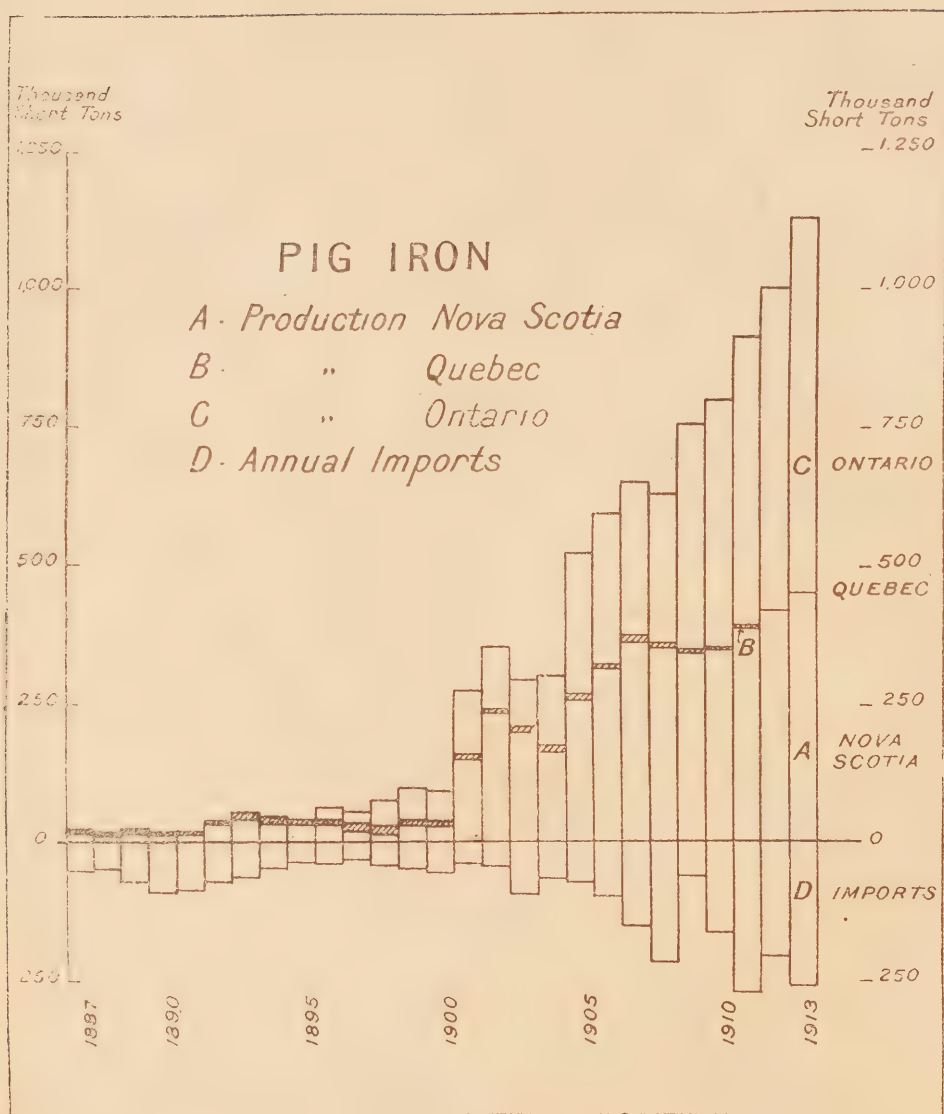
*Mining.*—Mineral production shows a gain of 64 per cent; here allowance is made for a drop in prices. Especially significant is the enormous gain in the production of pig iron, the barometer of "prosperity." About 20 per cent of the gain is accounted for by the discoveries at Cobalt.

*Manufacturing.*—It is difficult (on account of the number of manufactured articles) to eliminate the influence of changing prices, but it may be noticed that of 15 groups into which the census figures are divided, the group showing the second smallest rate of increase is food products, while the third smallest is shown in textiles (leather being the most stationary). Building materials, metal products, and vehicles and vessels for transportation purposes show gains of 200 per cent and up. Taking the various articles in which production in 1900 amounted to more than one million dollars and dividing them into (1) foods and household articles, and (2) miscellaneous materials, the increase in the production of the latter was 126.5 per cent as compared with 87.9 per cent in the former.

*Transportation.*—Railway and canal traffic may be regarded as the "product" of the capital and labour investments above recorded. It may be pointed out that the number of passengers carried by railways has increased 115 per cent, freight tonnage hauled 197.6 per cent, and gross earnings 262.9 per cent. Electric railways have increased their passenger traffic four times, their freight

\*In general terms, animal husbandry grew rapidly in production until 1905-6, after which period exports fell off. The census annual estimates were begun in 1908; they shew a steady decrease from year to year in cattle and sheep.





tonnage six times, and their gross earnings four times. Similarly, canal, coasting, and lake traffic show very large gains: the tonnage of freight passing through our canals has increased over 900 per cent. The items of the recent freight tonnage are significant. Wheat tonnage has greatly increased with the new Western areas. Flour has followed, but livestock has stood still. The other great gains are in the materials of expansion—bituminous coal (60 per cent), bar and sheet metals (1,384 per cent), pig iron (312 per cent), stone and sand (215 per cent), rails (581 per cent), castings and machinery (544 per cent), cement (112 per cent), oils (196 per cent), and general merchandise (89 per cent).

The above figures do not cover all the activities of the people. They show, however, that primary production, as might have been expected, has advanced at a much less rapid rate than has secondary production. Taking the total values of farm production, minerals, logs, fish, skins and furs in 1901 and 1911, respectively, and re-estimating the latter at 1901 prices, a gain of about 40 per cent is shown. Against this, as already seen, we must place a doubling of manufacturing output, a trebling of transportation activities, and a quadrupling of the scale of building operations. If to these are added certain figures reflecting the scale of general business,—such as foreign trade, sales on the stock exchange, postal and telegraph statistics, insurance risks, etc.,—and a rough average of the whole struck, the gain is shown as at the very least 200 per cent.

The cause for this, to repeat, is very largely economic, and the production figures in conjunction with those of capital furnish an interesting demonstration to this effect. If we take the total capital accorded to each industry by the census and the total value of the product similarly recorded in the census years respectively, the following facts appear: In agriculture in 1910 the value of the product was 15.7 per cent of the capital; in 1900 it was 20.4 per cent. In fishing, the value of the catch in 1910 was 37 per cent of the total capital employed, whereas in 1900 it was 96 per cent; the average return for the past five years was 58.9 per cent compared with 92.0 for the five preceding. In mining, there has been a similar decline. In manufacturing, however, the return has been about stationary, while in transportation the tendency on the whole would appear to be upward, *i.e.*, the volume of traffic has increased at a faster rate than the amount of equipment. In other words, the primary productive processes during recent years have not "paid" as well as the "secondary" occupations and those disassociated from food production. These tendencies, though accentuated in Canada, have been fairly general wherever industrialization has been the keynote of the times, as may be gathered from the section of the investigation devoted to world production whose figures have been already briefly cited.

#### (4) Distribution.

With the subject of distribution we enter the region where developments like those just outlined make themselves chiefly felt. When supply from an accustomed source fails to keep pace with demand the new costs are largely those incidental to employing new distribution agencies. We have already seen why a shifting of the source of supply involves a much greater disturbance to distribution and consequently a greater enhancement of price in the case of foods than in the case of materials. It remains to examine whether a change of this nature has actually taken place. Is it or is it not the case that Canada has been going further afield for her supplies—and more particularly for her food supplies? In a general way it is known that problems of food distribution have been acute in Canada, such phenomena as the decay of municipal markets, the multiplying of middlemen, the operations of alleged

combines, the tariff as affecting the channels in which trade flows, having been widely blamed for the rise in the cost of living; practically every complaint to reach the Government, in fact, has had its root in one phase or other of distribution. Can any broad light be obtained on the trend which has brought these phenomena into prominence?

The first avenue of information to suggest itself is the external trade statistics. Our trade commodities may be separated into foods and materials and the trend in each ascertained under three headings: (1) the United Kingdom, (2) the United States, and (3) all other countries combined. The export figures have been analyzed in this way since Confederation, and the imports since 1905. The United Kingdom and the United States, of course, account for the bulk of our external trade and the agencies through which it is conducted are naturally the most convenient and the cheapest. The countries of the third group are more distant and are less efficiently served. Obviously any shifting of the volume of trade from the first and second groups to the third group, means, other things being equal, an increase in distribution costs.

It is precisely a shifting of this kind that the figures reveal. Not only has there been a great rise in imports, but there has been a decided set in the direction of distant sources. Imports of agricultural and animal products from the United Kingdom and the United States have increased 103 per cent, but similar imports from other countries have increased 283 per cent. Whereas in 1905, 15 per cent of all Canadian food imports came from the United Kingdom and 66 per cent from the United States, these percentages had declined by 1913 to 9 and 63.8 respectively, while food imports from other countries rose from 18.7 per cent of the whole to 27.2 per cent. It is also significant from the prices standpoint that the process of reaching out to distant sources has been less marked in the case of materials than in foods; the rise in imports of materials from "other countries" has been from 14.2 per cent of the whole to 20.2 per cent. Another analysis of food imports (bread stuffs, fruits, vegetables, provisions, etc.) shows that whereas in 1900 their per capita value was \$5.28, in 1913 this had risen to \$10.04. It is noticeable also that sea-going tonnage inward in British and Canadian vessels has declined from 61.9 per cent to 50.5 per cent of the whole, while similar tonnage in foreign vessels has increased from 38.3 per cent to 49.5 per cent.

It is interesting to observe that, in the early stages of the Canadian rise, materials went up the faster, but that later foods took the lead; continued expansion in spite of its tremendous demand for materials in the end worked out its chief effect on prices through the medium of interrupted food production. The United States and Germany have had the same experience; not so, however, in the case of Great Britain, (see diagrams pp. 1037-8-9).

The above will help to explain why it is that the chief rises of the past ten years have been in the prices of Canadian home-grown food products. The reason is that in these products the failure of supply to keep up with demand has necessitated the maximum degree of change from nearby to distant sources, such change involving in the case of foods the maximum addition to distribution costs. Materials, which always tend to flow in world-wide channels, have shown no such rise, notwithstanding the unprecedented demand. Similarly exotic foods, which have always come from a distance, have experienced few additions to distribution costs; they are up 10 per cent in 1913 where Canadian foods are up 45 per cent. Bananas and oranges are marketed in Canada by much the same machinery as ten years ago; but the appearance of New Zealand butter, Chinese eggs and Irish potatoes on Ontario markets indicate a revolution in the methods by which Canadian households are supplied.

The same explanation can be invoked to account for the stability of British food prices as compared with Canadian. Great Britain, as is well known, has



for many years obtained her principal food supplies from distant sources. Food prices have accordingly been unaffected there by any such shift as has taken place here. They are accordingly, like the prices of exotic foods in Canada, only slightly up, materials contributing most to the British rise, (see again page 1038).

This, then, is the great factor at work in the section of the field now in review—the addition of distribution costs following an enlargement of the areas within which demand and supply are equalized. Up to the present we have considered the latter as due primarily to relative decrease in Canadian production. This, however, is not a complete view of the situation. It has already been pointed out that the underlying factor in the expansion was the drawing of Canada into the world-wide market scheme as a producer of cereals and other raw materials. Inasmuch as Canada has been an exporter of cereals for many years the increased demand in this respect has not created essentially new conditions, though it permits the point again to be emphasized that the main productive effort of the country in a new direction during the past few years has been on products destined for foreign consumption. In other lines, however, there is evidence that the general trend of trade to an international basis has affected Canadian conditions.\* The improvement of transportation facilities with Great Britain and other parts of the Empire, for example, represent increasing drains upon Canadian supplies. The new trade agreements in recent years with such countries as France, Germany, Belgium, Holland, the West Indies and Japan are further evidence of Canada's entrance into world trade. How powerful is such an influence may be seen by the transformation it has wrought in a typically Canadian industry like apple growing. The Canadian orchard of a quarter-century ago included a large number of varieties as desired by the Canadian consumer; the modern orchard is devoted almost entirely to winter apples for the British market. In cheese similarly there is evidence that the machinery of the export trade has been developed to the neglect of local distribution. The internationalizing of trade is essentially a process of specialization. It, of course, makes Californian oranges cheaper in Canada in the same way that it makes Canadian apples cheaper in England. In brief, it tends to bring local prices everywhere to the level of world prices, less freights to the recognized world market.

Very much the same in its effect has been the opening of the West as a market for Eastern food supplies. That the West has been entirely devoted to cereal production has implied that thus far its other food products have had to be supplied by the Eastern provinces—at a time when, as we have seen, increased demands within the latter had been created by the growth of city population. During several months of 1912, a carload of butter left Montreal for the West daily. The tariff reductions in the United States have more recently opened still another channel for the egress of Canadian products, the effects of which have yet to be seen.

Thus the recent rise which Canadian prices have shown over those of the United Kingdom, France, and similar countries, and which was located primarily in food prices, appears to have been caused in large part by new distribution costs resulting from an increase in the areas from which supplies must be obtained, this in turn being due to the disturbance of local production resulting from the attraction of capital and labour on a large scale into con-

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\*"There is one broad feature of the past thirty years," says Mr. R. H. Hooker (*Journal of Royal Statistical Society*, June, 1909, p. 304), of which it is not too much to say that its bearing upon almost all questions of supply and prices is fundamental. . . . With nearly all kinds of produce, prices are nowadays determined by the supply and demand, not of a particular country, but of the whole world. Means of communication and transport have developed so enormously of late years as to produce a complete revolution in the conditions governing prices, and trade is no longer regulated by internal concerns, but by the sum total of the varying influences in all countries of the globe."

struction and industrialism—added to which is the effect of the trend towards an international trade basis which by opening up new markets to Canadian produce has still further reduced the supplies available for home consumption.

### (5) Consumption and the Standard of Living.

The final criterion of economic change is in the lives of the people. Has the standard of living risen or fallen since 1900? The common impression is that it has risen, so greatly as to make it a primary factor in the advance of prices. That the true key of economic progress is the development of new activities, rather than of new wants, as Alfred Marshall states, and that, in the words of the same authority, "it is necessary to bear in mind the distinction between a rise in the standard of life, which implies an increase in general efficiency, and a rise in the standard of comfort which may suggest a mere increase of artificial wants among which the grosser wants predominate even though it does to some extent imply a rise in the standard of life," makes the subject of first importance. It suggests also its complexity and the need for breadth of treatment.

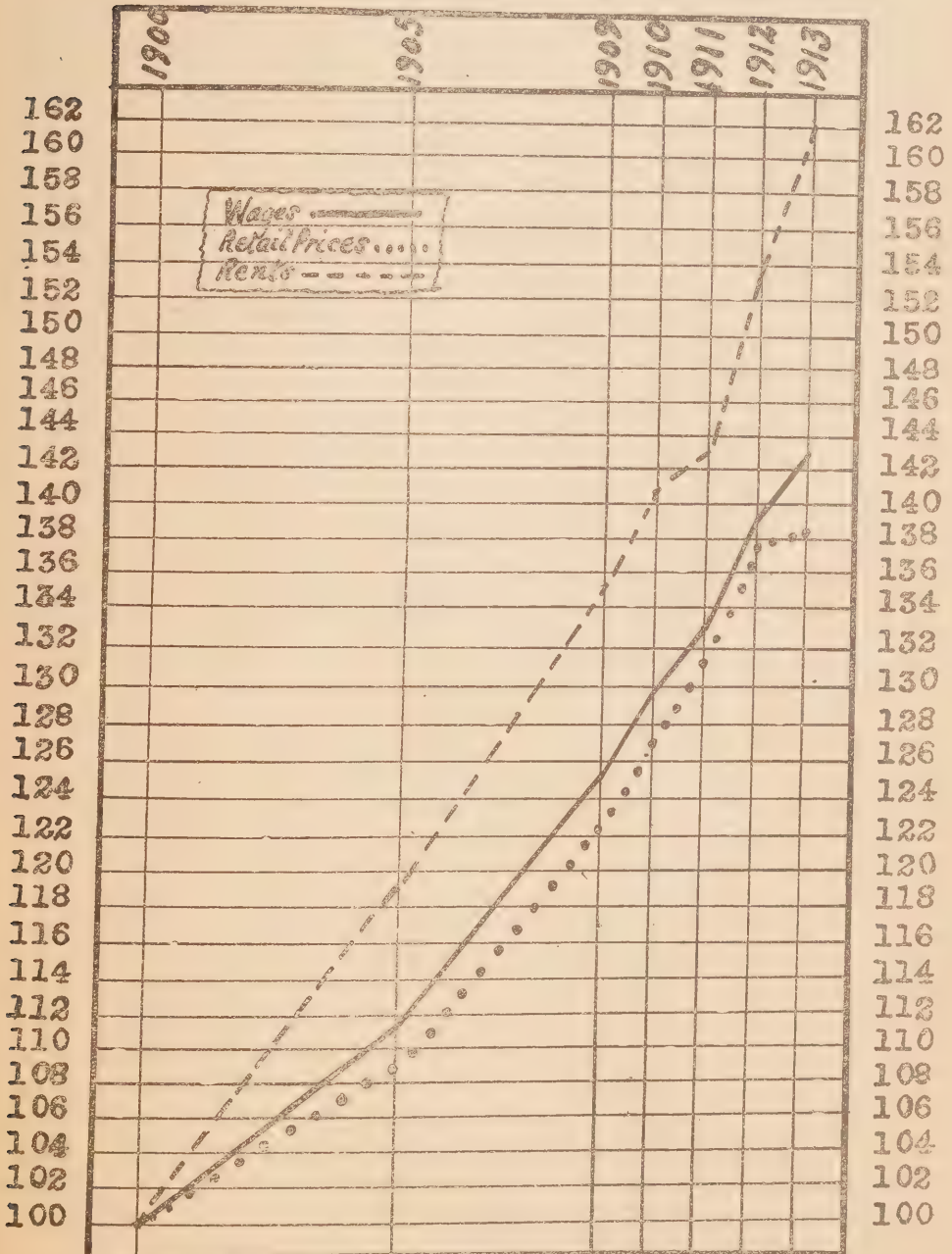
First as to necessaries: the per capita consumption of the common foods has materially increased,—wheat and flour, perhaps one-half; dairy products, 30 per cent; beef, 10 per cent; pork, 20 per cent; eggs, 26 per cent; tea, 12 per cent; coffee, 100 per cent; sugar, rice, prunes and raisins, over 40 per cent each; bananas, three times; cocoa, four times; etc. Increases of this nature might be classified as conducive to efficiency, though there is room for waste or extravagance here as elsewhere. Such features as the increased use of package goods, the preference for the choicer cuts of meat, better delivery service, ordering by telephone, changing styles in clothes, etc., are, of course, frequently cited as evidence of the latter.

The chief charge of undue expenditures, however, is usually in connection with luxuries, the consumption of which has increased even more rapidly than the above. The use of malt and spirituous liquors has increased about 60 per cent since 1900, that of tobacco, 66 per cent. The increases in the imports of silk, jewelry, perfumery, precious stones, etc., run into the hundreds per cent. The fact that in 1912 Canada spent over ten million dollars on motor cars for recreation purposes is particularly in point.

Side by side with these tendencies, however, are others of a different complexion. It has already been remarked how the increasing attraction of the foreign market has operated on articles like cheese and apples; the consumption of both these staples has declined, illustrating the influence of trade conditions as well as psychology on consumption standards. The increased consumption of oranges, in fact, often mentioned as luxurious, may in part be attributed to the rise in apple prices. A decline in per capita consumption of mutton has followed the neglect of sheep raising. But an even more contradictory feature is that expenditures on the "higher life" have increased quite as rapidly as expenditures on luxuries. On education a per capita increase has taken place in every province; in Ontario and Quebec it is more than 100 per cent. Contributions to churches have markedly increased, those of the Presbyterian Church for all purposes from \$11.93 per communicant in 1900 to \$17.91 in 1913, and those of the Methodist Church for missions and certain other services from \$2.02 in 1900 to \$4.24 in 1914. Life insurance premiums are an excellent barometer of thrift—the exact opposite of "extravagance": the per capita expenditure in this connection has grown from \$2.81 in 1900 to \$4.87 in 1913.

Moreover, the period has not been without signs of deterioration as well as of advance in standards. From the housing statistics of the census a down-

## WAGES, RETAIL PRICES AND RENTS, CANADA, 1900-1913.





ward as well as an upward tendency may be deduced. The typical Canadian condition, that of one family to a house, fell from 94 per cent of the whole to 92 per cent during the decade 1900-1910. This is perhaps too slight a change to be emphasized, otherwise than as a straw to point the wind; entirely unfavourable, however, is the fact that the number of families living in a single room increased 74 per cent, or from 4.3 per cent of the whole in 1900 to 5.7 per cent in 1910. While the better paid classes have perhaps improved their housing standards, (the number of families living in eleven rooms or over went up by 60 per cent, or from 7 to 8.3 per cent of the whole) and while in so far as construction materials are concerned the tendency is toward a more permanent type of dwelling, the unskilled and immigrant classes in the larger cities are crowded together to a degree that is new in the history of the country. This is in some measure due to the influx of industrial workers with lower standards of living, the presence of which probably reflects the emancipation of the native Canadian worker from the more disagreeable forms of labour. But an examination of the course of "real" wages (i.e., the ratio of earnings to the cost of subsistence) over a wider range (necessarily inconclusive owing to lack of statistics) leaves it open to question whether in spite of the great rise in money wages the standard for workers as a whole is appreciably higher,—this notwithstanding the abundance of employment which has prevailed and the many evidences of greater comfort in the modern family. Wages, speaking generally, have risen 43 per cent—the investigation having covered the chief industries and groups of trades in the several provinces. But there has been considerable inequality as between classes like agricultural labour and the printing trades on the one hand and less skilled industrial workers on the other. Wages of the former have risen faster than the rise in retail prices, wages of the latter not so fast. This, however, leaves out the important item of rent. An analysis of approximate incomes and expenditures shows that whereas foods cost in 1913 about the same per cent of current income as in 1900, the percentage going for rent has risen from 20.9 to 24.7—an increase only to be met by economies in other lines.\* Considerations like the decreasing size of the family, the development of woman labour, and the decreasing share of labour in the gross profits of industry, must also be discounted. On the last mentioned point it may be noted that although the earnings of the average employee in manufacturing establishments increased 40 per cent, according to the census, between 1900 and 1910, proportionately to the value of the product the total wages bill declined from 23.5 per cent to 20.6 per cent.

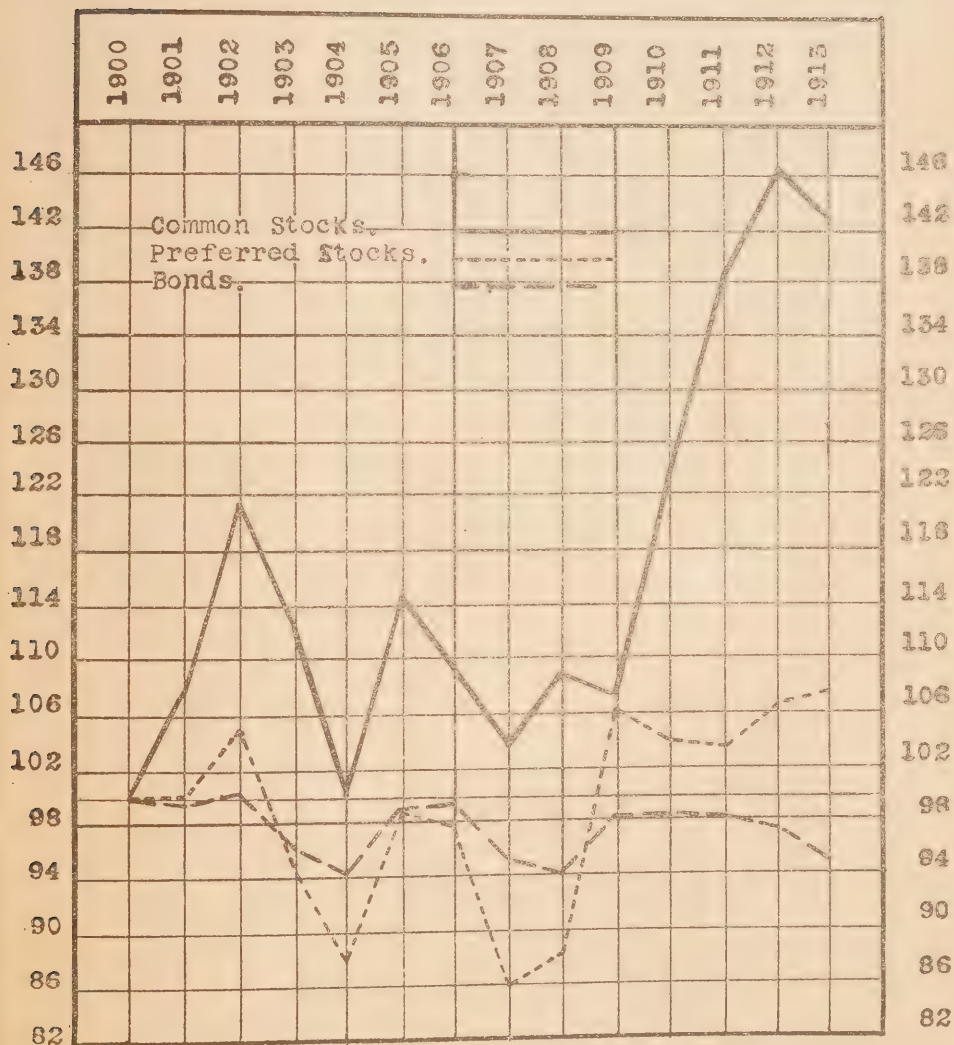
A contrariety of experience, then, is a prominent feature of the past few years, viewed from this standpoint. In this is probably to be found the explanation of the origin of the change in living standards. It is primarily a reflection of an era of boom and of the fact that the distribution of the resulting prosperity has not been uniform. Large numbers have had their incomes increased not only absolutely but relatively, and have spent the increase in various ways as their desires dictated, while others, though their incomes may have advanced absolutely, have shared less relatively or not at all in the rise. Perhaps no better illustration is available than that afforded by the prices of stocks as opposed to those of bonds. Stocks, as is well known, represent the interests of the *entrepreneur* class, which operates largely on borrowed capital, while bonds represent the interests of the creditor class—the two main sections into which the modern community is divided. The first class profits by the high prices of "good times" through increased earnings; the second suffer because their earnings are stable whilst their expenditures are increased by high prices. The

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\*It was formerly a common calculation in Great Britain that rent should not constitute more than 12 per cent of total expenditures. In Canada the similar minimum used to be 18 per cent.

THE COURSE OF COMMON STOCKS, PREFERRED STOCKS AND INDUSTRIAL BONDS, CANADA, 1900-1913.

(Prices in 1900 = 100.)



results of the section of the investigation devoted to the prices of Canadian securities are accordingly of fairly general application. It may be said in fact that everyone is either a stockholder or a bondholder in the sense that his interests are affected under a rise in prices in the one way or the other. Briefly, these results may be summed up as follows: An investment of \$100 in a typical Canadian stock in 1900 was in 1913 worth \$143.50; in other words the purchasing power of the investment, notwithstanding the rise in cost of living, was unimpaired. On the other hand an investment of \$100 in a typical industrial bond in 1900 realized only \$95 in 1913 and its purchasing power in view of the rise in prices was probably not more than the equivalent of \$66 in 1900. This, however, is not all. The bondholder's rate of interest remained unchanged, so that in order to maintain his standard of living he would have had to consume a part of his capital. By 1913 he was probably not more than half as well off as in 1900. With the stockholder, however, there has been a rise of from five to nearly nine per cent in the rate of return, taking into account increased dividends, bonuses, "rights" on new stock issues, etc. This, it will be observed, is a greater rise than has taken place in commodity prices. § In this margin of great profits in the operations of the financial and commercial classes—including real estate dealers, promoters, brokers, agents, and all who are in essence if not actually holders of stocks as opposed to bonds—is to be found the root of the "extravagance of the age"—in that and in the fact that the individual's standard is to a degree determined by that of the community in which he lives. The increased standard is not the primary cause of the rise in prices, though, of course, once set in motion it increases the demand for goods. The whole phenomenon is one of the most familiar features of a period of speculative boom, disappearing when the boom has passed and stock and bond prices and the fortunes of the two great classes which they represent tend to an equilibrium. The belief has been expressed in high financial quarters that there will be a considerable reduction of credits within the next two years, and that investors who are now demanding securities with large returns and great speculative opportunities, will shortly prefer securities with a lower income yield coupled with great safety—a very significant turn of opinion.

### "Causes."

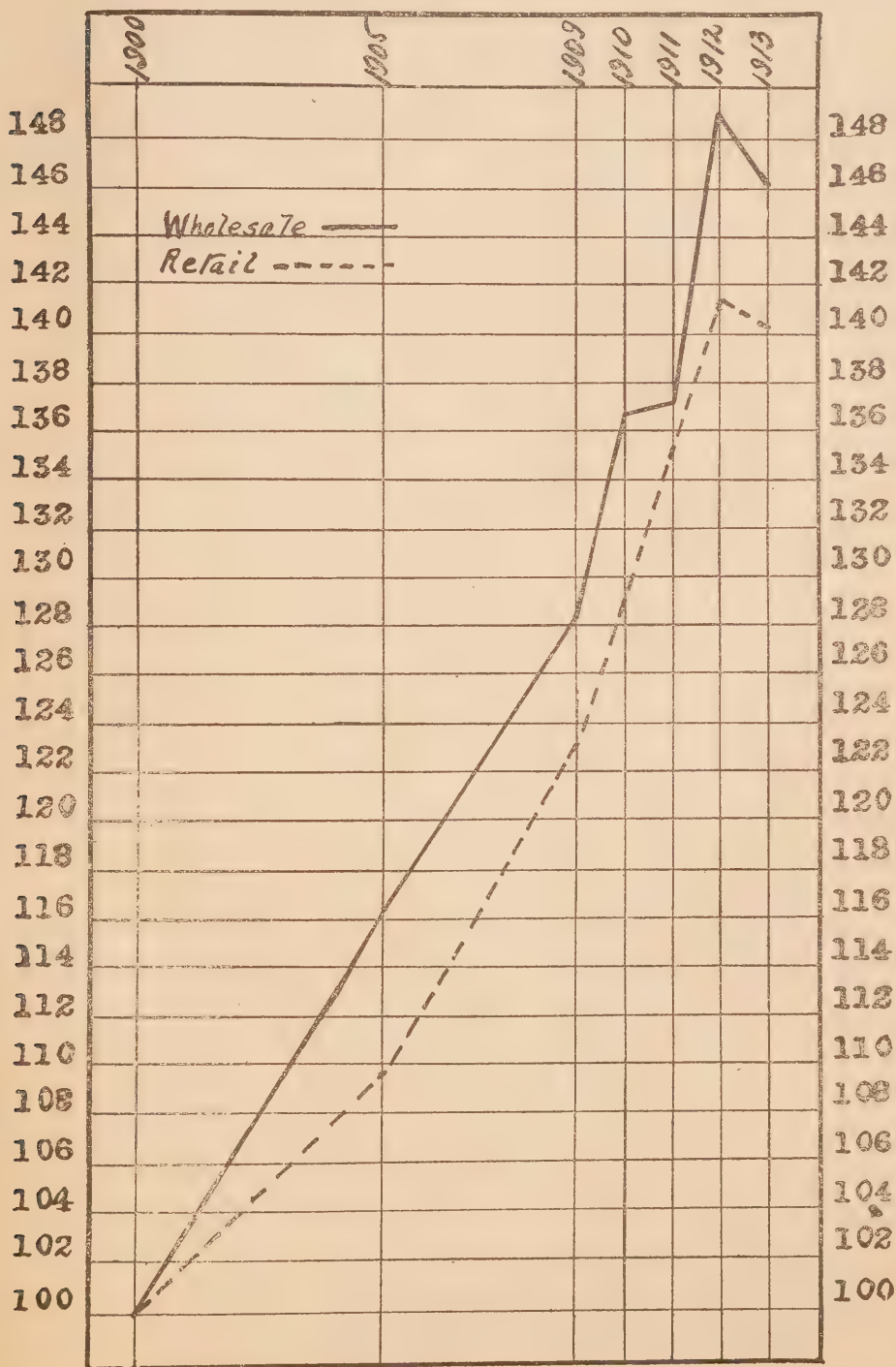
The foregoing, it is thought, will assist in "placing" in the general scheme most of the commonly cited "causes" of the rise in prices of particular commodities. The noticeable *expensiveness of business methods*, like the *extravagance* just referred to, is the product of "good times," when even the inefficient make profits and when even misdirected energy has its reward. ‡ To blame the *middleman* for the high prices is natural enough when the multiplication of middlemen may be seen everywhere; it should be realized, however, that this multiplication also is natural when supply shifts from a local to a nation-wide and even world-wide basis, and when, as a by-product of prosperity, competition in price tends to give way to competition in service. The evidence would show that retail prices have in the main followed wholesale. *Mergers and big business* flourish in the same soil; publicity and regulation are the needs indi-

§As the investigation was based on listed stocks alone, whereas the closely held unlisted stocks are often the most profitable, the conclusion here arrived at is probably an understatement.

‡The use of advertising has been brought to an unparalleled development. Advertising has undoubtedly enabled many articles to be sold at an excessive profit and has created a large part of the demand for package goods and other expensive devices. This is a fact that cannot be estimated with precision, but it remains true that advertising is a force "which has helped to make possible the monopolization of certain articles." The truth is that efficiency in spending is as necessary as efficiency in earning, and the former is dulled in "good times."



WHOLESALE AND RETAIL PRICES OF FOODS (27 ARTICLES) AND FUEL AND LIGHTING (3 ARTICLES), CANADA, 1900—1913.



cated. Similarly, when a change is made from a domestic to a foreign source of supply the *customs duty* may become one of the direct additional charges incurred. The decline in *municipal markets* is a further indication of the change which has come over the distribution problem. The municipal market of the old type was a device to bring the consumer and the neighbouring producer together; the successful municipal market of to-day is one well situated with regard to railway and tramway terminals, and the fact is eloquent of the change that has come over methods of supply. *Cold-storage* affords an excellent instance of the complexity of the new situation. Because it may be used, when privately owned, to control supply, (though under difficulties that are commonly understated, seeing that only about 5 per cent of the supply goes into storage) it has been blamed for the rise in food prices. Yet its advantages are no less patent. It equalizes the supply of perishable products throughout the year, and it enables such products to be brought great distances. It is in the latter connection perhaps that its significance as a factor in the rise in prices lies: it is one more device rendered necessary by the process of going far afield for food products; when that process has its origin in local failure of supply it is symptomatic of higher prices. Moreover it offers additional facilities for shipping local foods to distant markets. Thus while it regulates the prices of local producers, it also provides them with an outlet. On the whole the nearby source is under ordinary circumstances the cheapest. With regard to *strikes* and *higher wages* as affecting prices, the effort to adjust wages to the rise in the cost of living is the explanation of 80 per cent of the labour unrest in Canada since 1900. Over long periods there may be a rise or fall in "real" wages, but in times of rapid change like 1900-1912, wages follow rather than lead; it is significant that some of the highest rises have been in non-unionized occupations like farm labour and domestic service. *Land speculation* is to be justly condemned, for though speculation in joint-stock securities and in commodities performs a certain service in distributing risks, no similar service is performed by the land speculator, who frequently imposes overhead charges that are a permanent handicap on industry. From the chapter on rentals, it would appear that rent of land has received an increased portion of the dividends on production since 1900. As to *wars* and *militarism*, the drain upon materials caused by the rivalry of the nations in armaments and by the four great wars of 1900-1913 has been so enormous as to rank it in importance with the world expansion above described. It is a striking fact that the expenditures of a single year on war preparations by the seven great nations are approximately the same amount as Canada's total borrowings from Great Britain since 1907—the effects of which on Canadian progress are the subject-proper of this memorandum. But the number of "causes" in a category of this kind can be enlarged almost indefinitely; a writer has enumerated over eighty. Enough has been said to warrant the conclusion that most of the phenomena mentioned are in the main incidental; they are not the tide, they are rather waves upon the tide, and explanations of the rise in prices should not treat them as fundamental. Such phenomena in the great majority of cases obey economic influences; they are closely associated the one with the other as the briefest analysis will show.

### Conclusion.

The great rise in prices that has taken place in Canada is accordingly found to centre largely in the new distribution problem which has been created by the lessening of local food supply during an era of heavy expenditures on capital account. The incident is not new to Canadian history; almost an exact counterpart is to be found in the experiences of the provinces during the 1850's while the original railway and canal systems of the country were under construction.‡ That the tendency recently has been the same in several other "new" countries has intensified the Canadian situation. "The rise in the cost of living," says Sir George Paish, "came from the remarkable credit the world enjoyed in the past ten years and the greatly increased consumption of the nations that were able to borrow." In the manifestation of this to a very pronounced degree in Canada is to be sought the explanation of the rapidity of the Canadian price-rise. As indicating that we have here the root of the matter one final incident may be cited, namely, that it was the stopping of the inflow of capital by the Balkan war that in reality led to the appointment of the present Board of Inquiry. The war occurred early in 1913, affecting first and chiefly Austria and Germany. Its influence spread thence to France and England and from the latter to Canada. The result was a lessening of employment which caused the prevailing high prices to be severely felt; at the same time it had already in the autumn of 1913 set in motion a very perceptible tendency on the part of prices, and particularly rents, to seek lower levels.† This tendency was world-wide but was chiefly felt, of course, in countries obtaining their capital from outside. It was steadily gathering momentum when the outbreak of the great war threw the situation into confusion.

The Order-in-Council appointing the Board does not call for suggestions as to remedies, but it may be stated that the remedial lines which this inquiry indicates are the encouragement of food production and the removal of every possible economic weight in the distribution process. Many concrete suggestions have been made having reference to particular phases of the problem, such as industrial education, co-operation, the amelioration of labour conditions on the farm, the expansion of rural credit, etc., etc., and though the excellence of these does not depend on the price level, and though they will not prevent the pendulum of prices from swinging in obedience to economic attraction, their introduction as *new* influences would undoubtedly mitigate the effects of the high prices. (It may be pointed out that in spite of current tendencies the price of electric lighting has gone down almost one-half following the municipalization of plants and the operations of the Hydro Electric Commission of Ontario—a result which forced down the price of illuminating gas, but, significantly enough, had much less effect on the price of fuel gas.)‡ The reorgani-

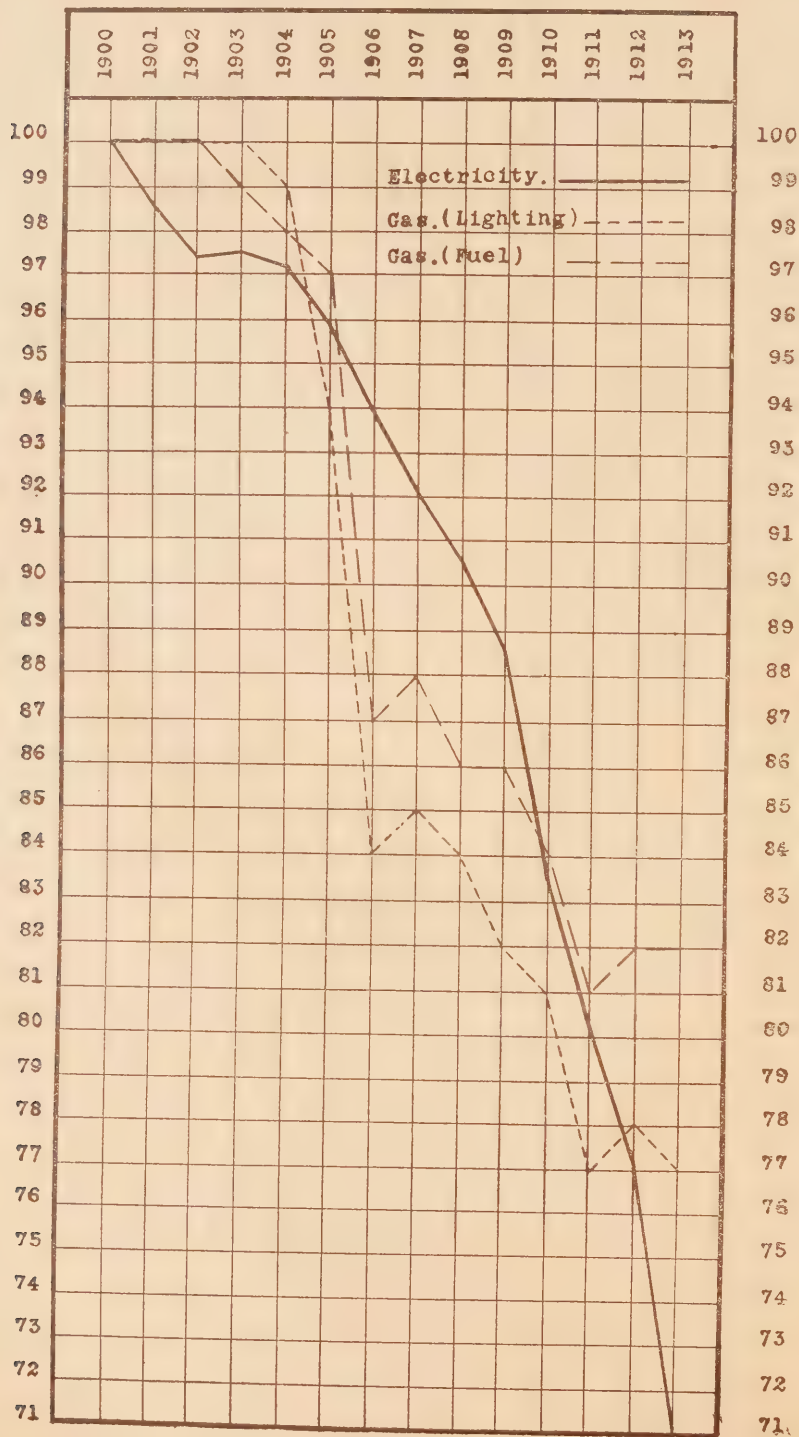
‡Altogether about \$100 millions were spent on railways in Upper and Lower Canada between 1849 and 1859 and an additional \$11,500,000 on canals, about the same per capita as in recent years. The new railway systems included the Grand Trunk, the Great Western and the Northern. There was a real estate boom of enormous proportions and a rapid growth of the cities at the expense of the rural districts. Immigration, foreign trade and government and municipal borrowings were on an unprecedented scale. Prices rose 80 per cent in four years. Then, as recently, the rise was chiefly in native products; butter and eggs being imported in large quantities from the United States. The first strikes in Canada occurred during the decade. The "extravagance of the age" and the exactions of middlemen were frequent themes. The check came in financial stringency. Canadian newspaper editorials of the 'fifties on the theme of the high cost of living might have been written yesterday.

†This sensitiveness of rents is a further indication that the most intense effects of the boom are seen in real estate values.

‡Because, of course, of the greater use and therefore greater competitive force of electricity for lighting than for fuel purposes. [See Part I, Section (2)].



## PRICES OF ELECTRIC LIGHTING AND OF ILLUMINATING AND FUEL GAS, 1900-1913.



zation of Canadian official statistics may perhaps be mentioned in this connection, for without comprehensive and up-to-date measurements of the kind it is impossible to grasp the significance of current phenomena\*. That the process of development which has created the great rise has been over-rapid is frequently stated, but when it is remembered that all such developments are necessarily against the future, it will be seen that the answer depends on what is made of the future. The situation has been pronounced sound by Sir George Paish, one of the most practical of observers, and speaking from the quarter from which most of the outside capital now invested in Canada has come,—provided the country turn its energies to production, against which the great outlays of the past ten years have been made. “No debtor country,” says Mr. Hartley Withers (*The Meaning of Money*).—“that is, no country which has borrowed extensively from the investors and money-lenders of other countries,—can afford the luxury of what is called an unfavourable trade balance,” except, of course, during the period of actual transfer of capital. This review may, therefore, fitly conclude with the more explicit words of Sir George Paish: “It is evident that the railway machinery created to take care of the production of the country is sufficient to deal with at least twice, if not three times, the existing output, and it is obvious that the burden of interest upon the immense amount of capital supplied will be a heavy one until the productive power of the country is greatly increased. I am convinced that every possible effort will be made by all concerned—the Canadian Government, the Provincial Governments, the municipalities, the great railway companies, bankers, traders and others as well as by British investors—to increase rapidly the agricultural and mineral output of the country upon which the welfare of the Canadian people, both individually and collectively, absolutely depends, and that the effect of their concerted effort will be so great that the country will carry with safety a burden of interest which might otherwise overtax its strength. It is, however, of the greatest possible importance that the work of directly increasing the productive power of the country by placing a larger proportion of the population upon the land and in the mines should be carried out with the least possible delay.”

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\*Sir Robert Giffen has pointed out that countries engaged like Canada chiefly in the production of raw materials are apt to suffer in “bad times” more than manufacturing countries for the following reasons: (1) because there is a greater liability to produce raw materials in excess; (2) owing to their lack of capital they are the first to suffer in a money stringency; and (3) such countries are usually defective in economic knowledge. He added: “If improvement is to come at all, new countries must seek to compensate their natural liability to great commercial fluctuations by a more prudent rate of expansion, and by a more careful study of the lessons of political economy, the neglect of which may be less injurious to them than to an older country, but is still very injurious.” (*Essays in Finance*, 1st Series, p. 140). Lack of an alert and educated public opinion in Canada may be read in the vagaries of retail prices. For example, in June, 1914, there were over 20 different prices of bread in 50 localities, ranging from 2 and a fraction cents to 6 cents a lb.

CHARTS SHOWING THE COURSE OF PRICES SINCE 1900, IN  
VARIOUS COUNTRIES.

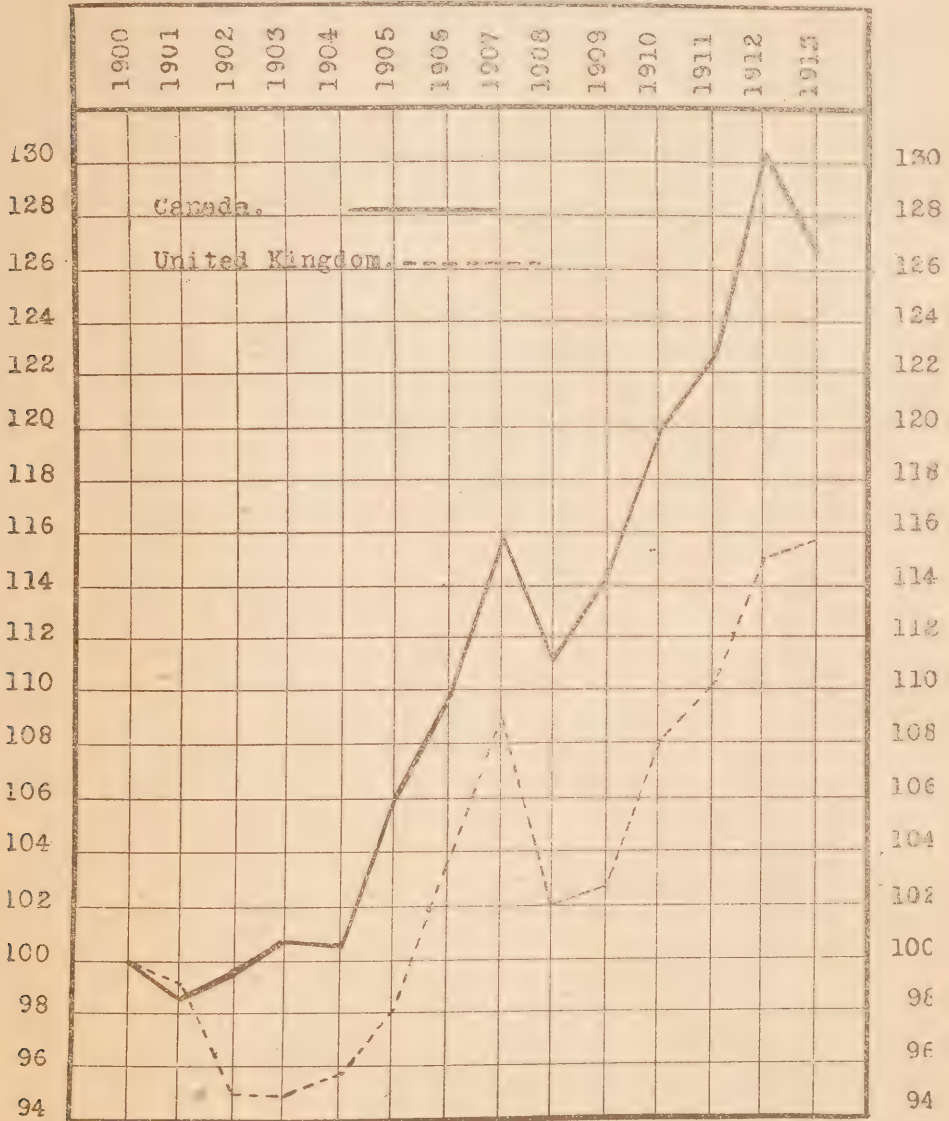
NOTE.—In the following charts the comparisons as between Canada and several countries are based in each case on the same commodities, the latter including all articles for which comparative statistics could be found in official publications. The comparisons it will be seen cover in most cases both wholesale and retail prices.



# WHOLESALE PRICES IN CANADA AND THE UNITED KINGDOM, 1900—1913.

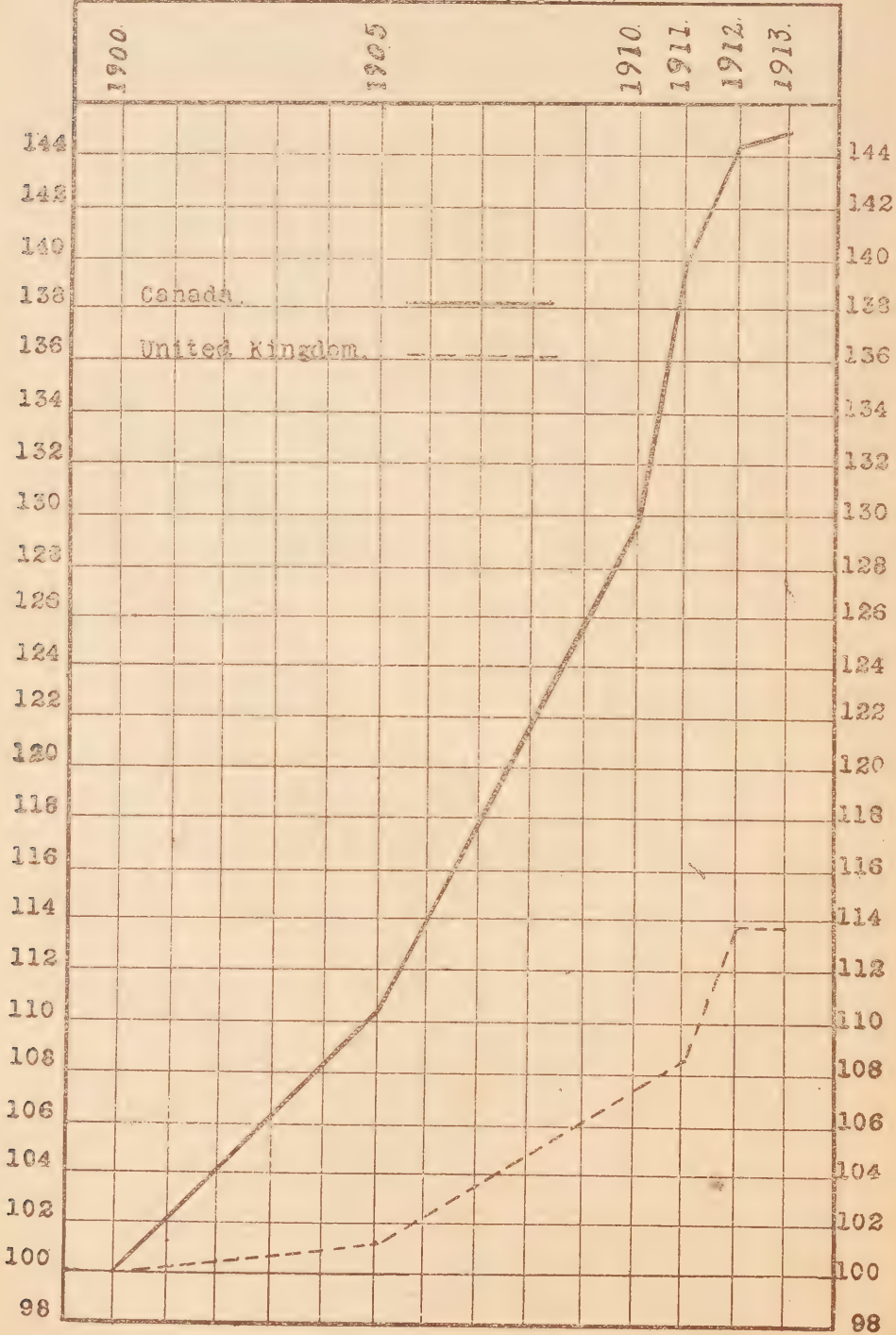
Number of articles, 52<sup>1</sup>/<sub>2</sub>

Prices 1900 = 100



RETAIL PRICES OF FOODS IN CANADA AND THE UNITED KINGDOM, 1900—1913

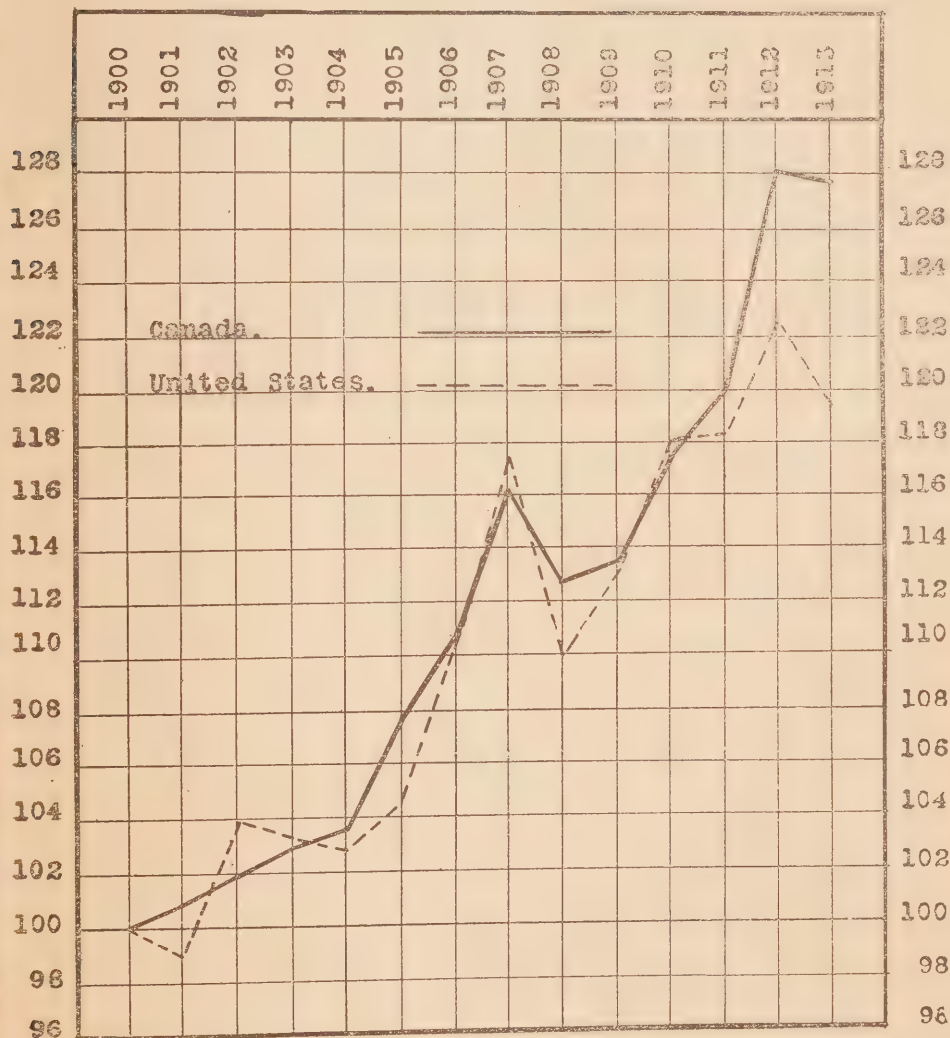
Number of articles 16Prices 1900 = 100



## WHOLESALE PRICES IN CANADA AND THE UNITED STATES, 1900—1913.

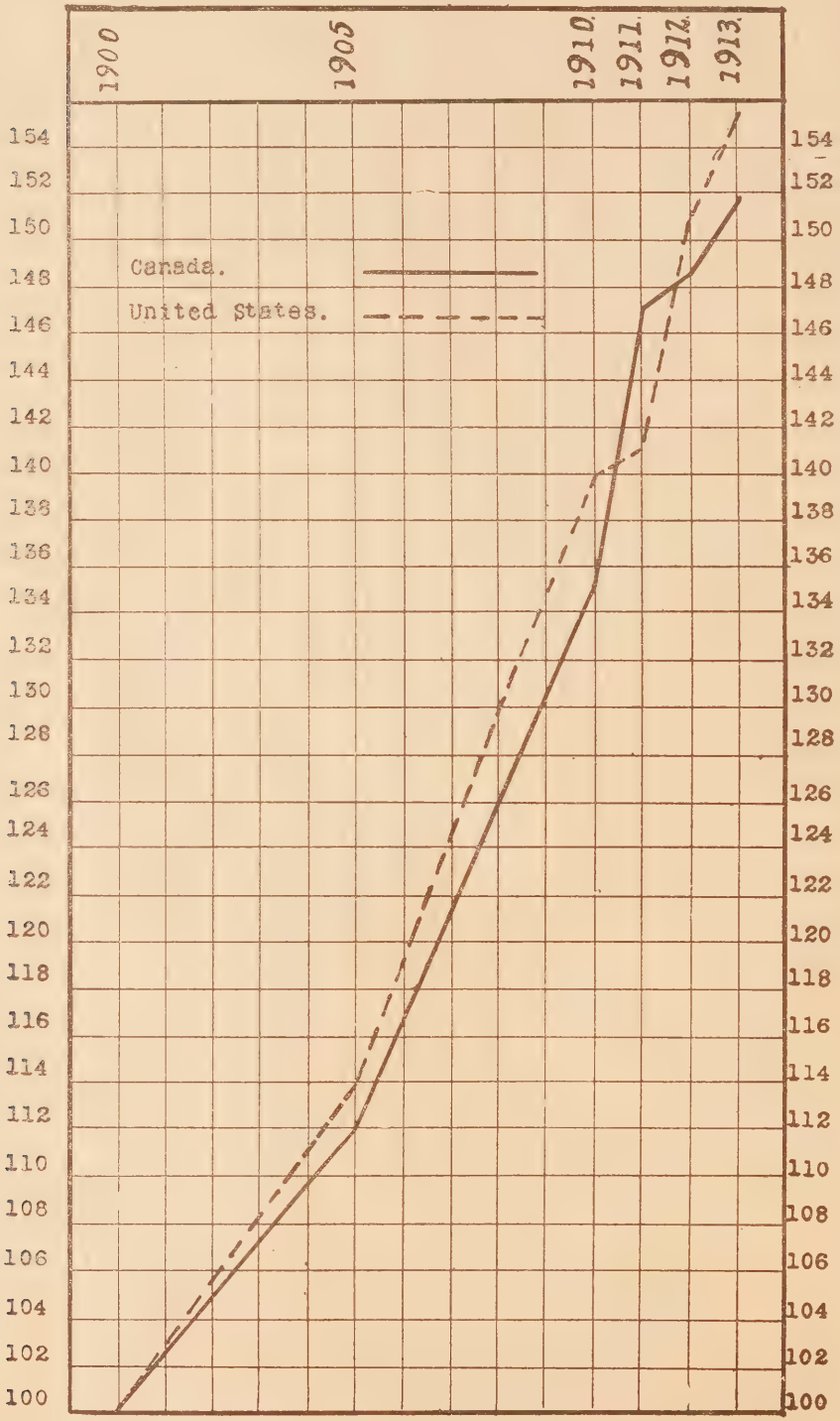
No. of articles, 135.

Prices in 1900 = 100.





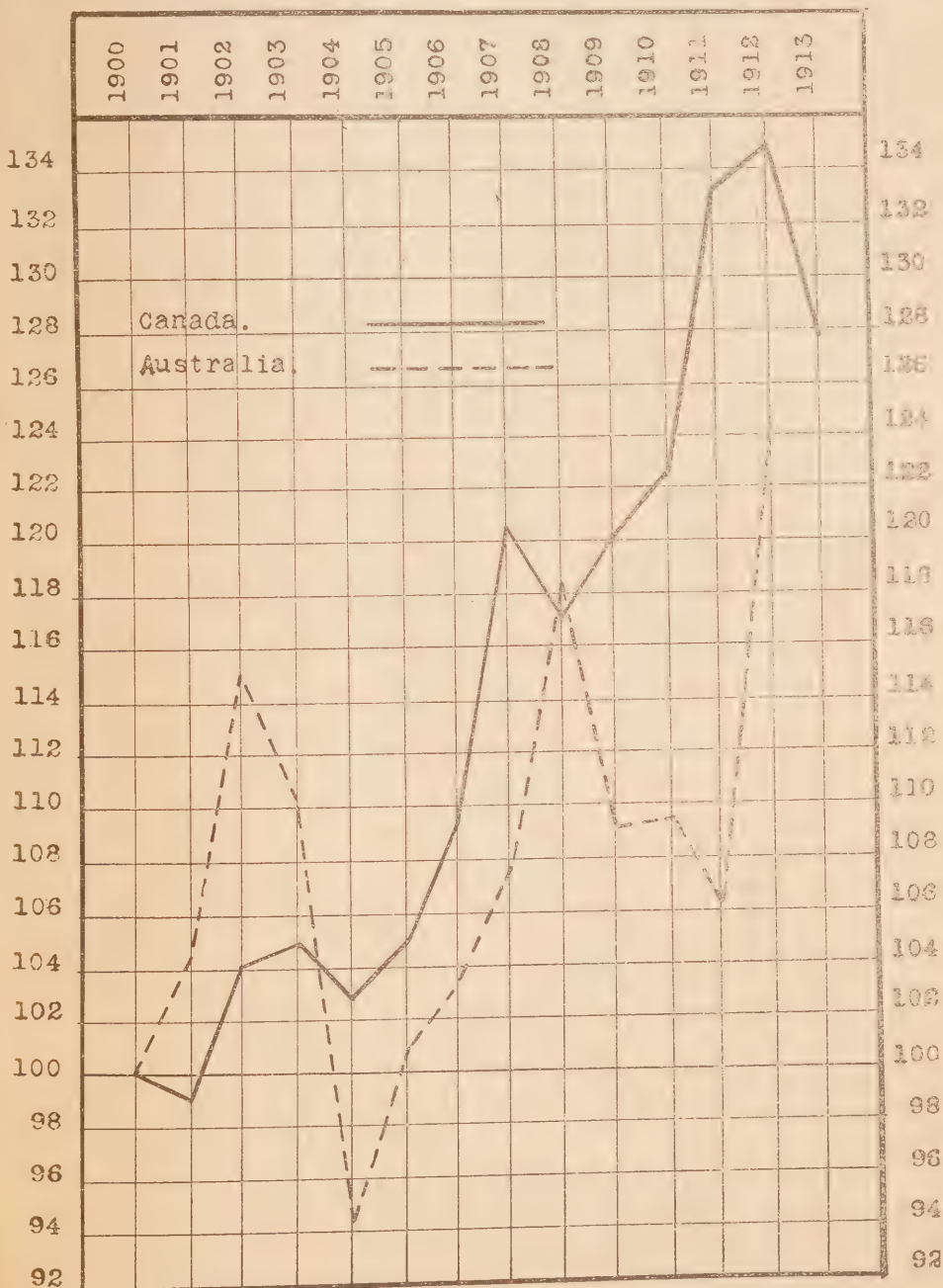
RETAIL PRICES OF FOODS IN CANADA AND THE UNITED STATES, 1900—1913.  
Number of articles, 11. Prices in 1900 = 100.



## WHOLESALE PRICES IN CANADA AND AUSTRALIA, 1900—1913.

Number of Articles, 52.

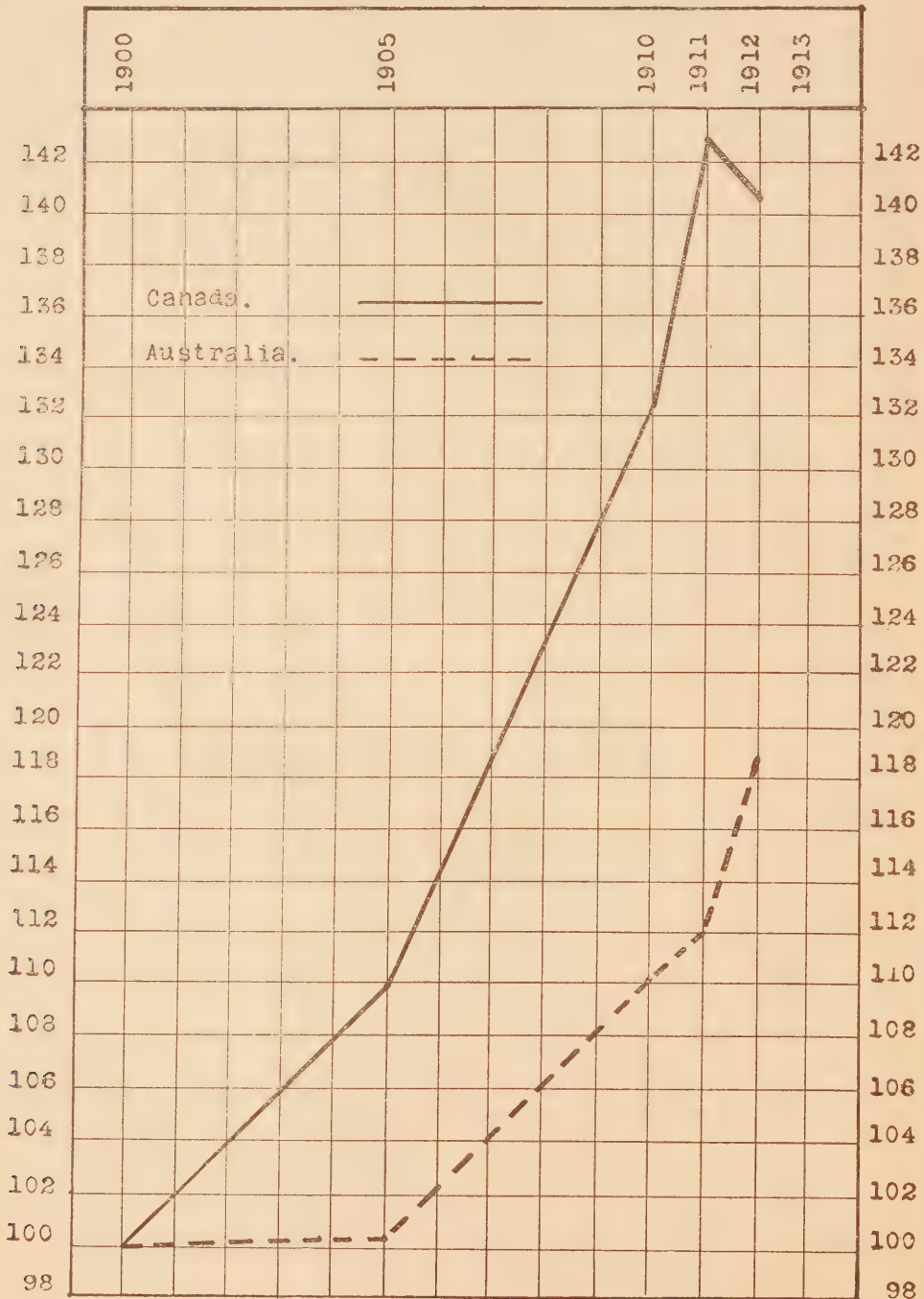
Prices in 1900 = 100.



## RETAIL PRICES IN CANADA AND AUSTRALIA, 1900—1913.

Number of Articles, 19 (weighted).

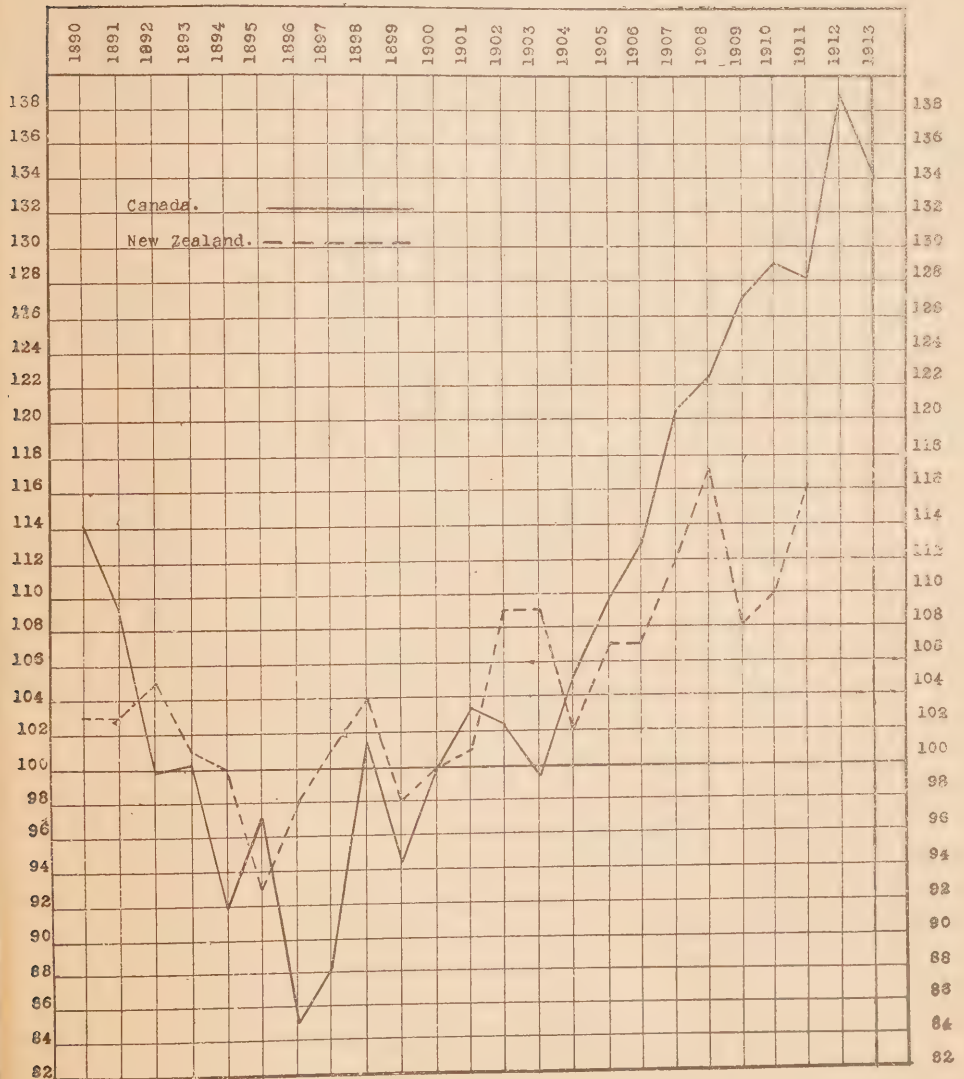
Prices in 1900 = 100.





# WHOLESALE PRICES OF FOODS (17 ARTICLES) IN CANADA AND NEW ZEALAND, 1890-1913.

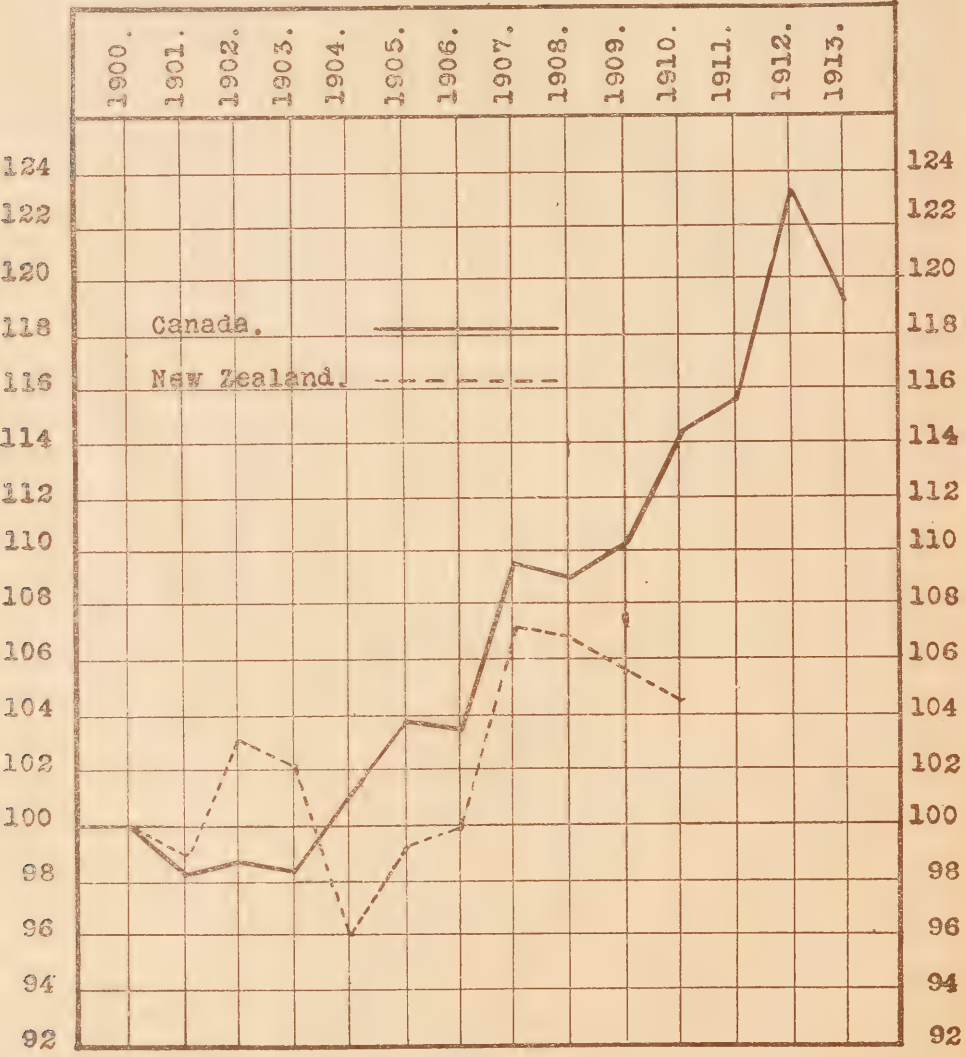
Prices in 1900 = 100.



WHOLESALE PRICES IN CANADA AND NEW ZEALAND, 1900-1913.

Number of Articles, 37.

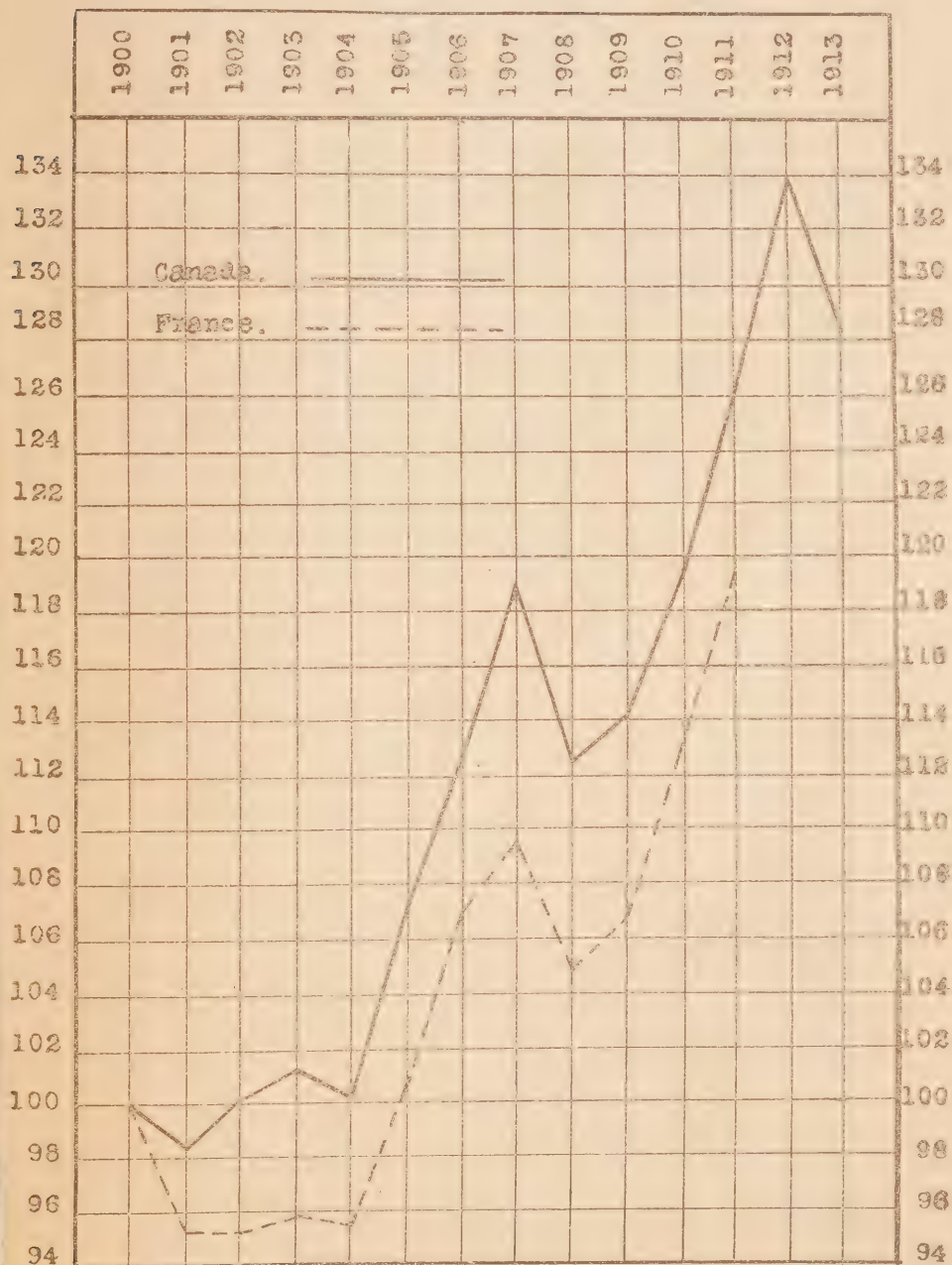
Prices in 1900 = 100.



## COURSE OF WHOLESALE PRICES, CANADA AND FRANCE, 1900—1913.

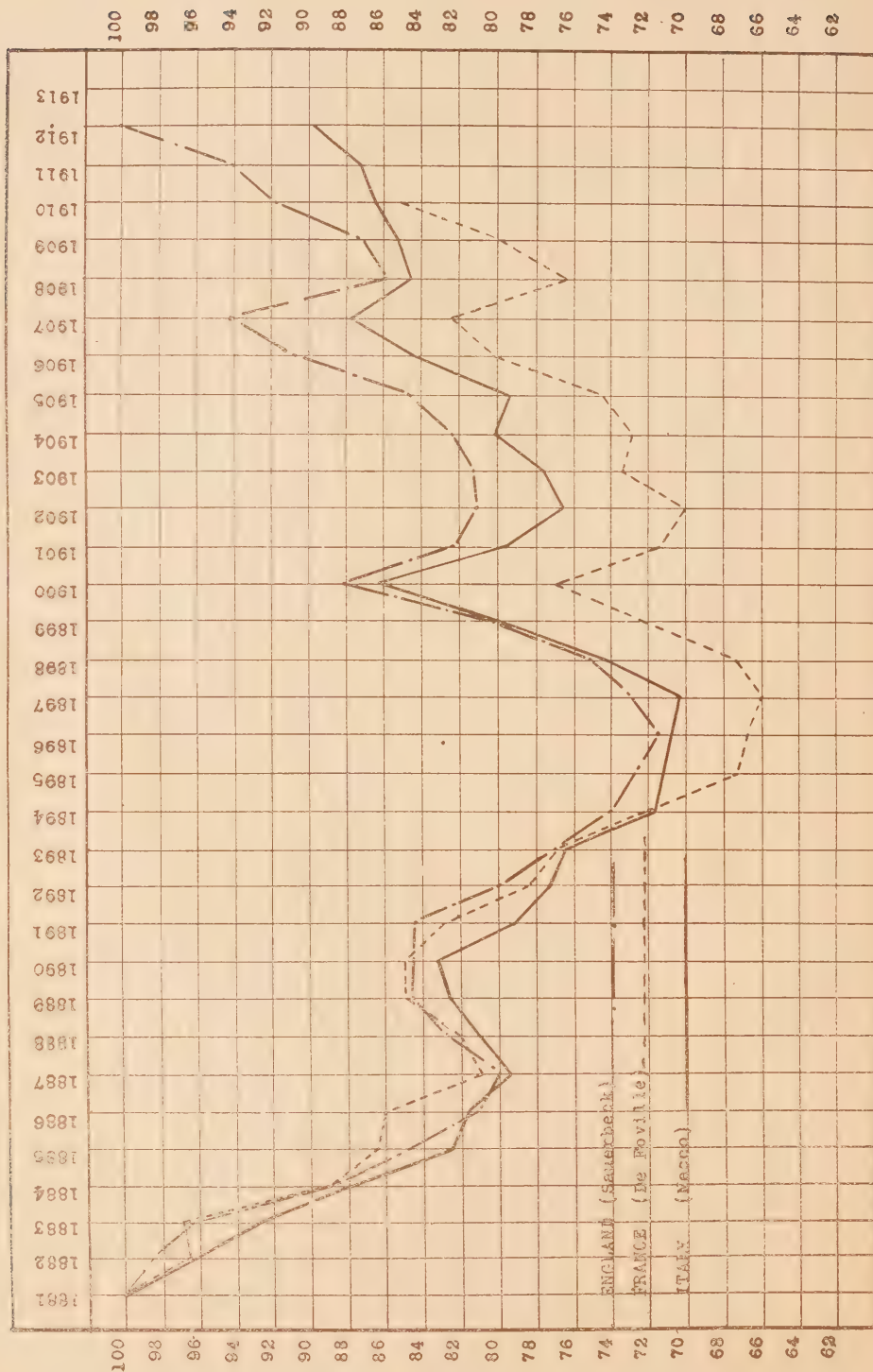
Number of articles included, 38.

Prices in 1900 = 100.





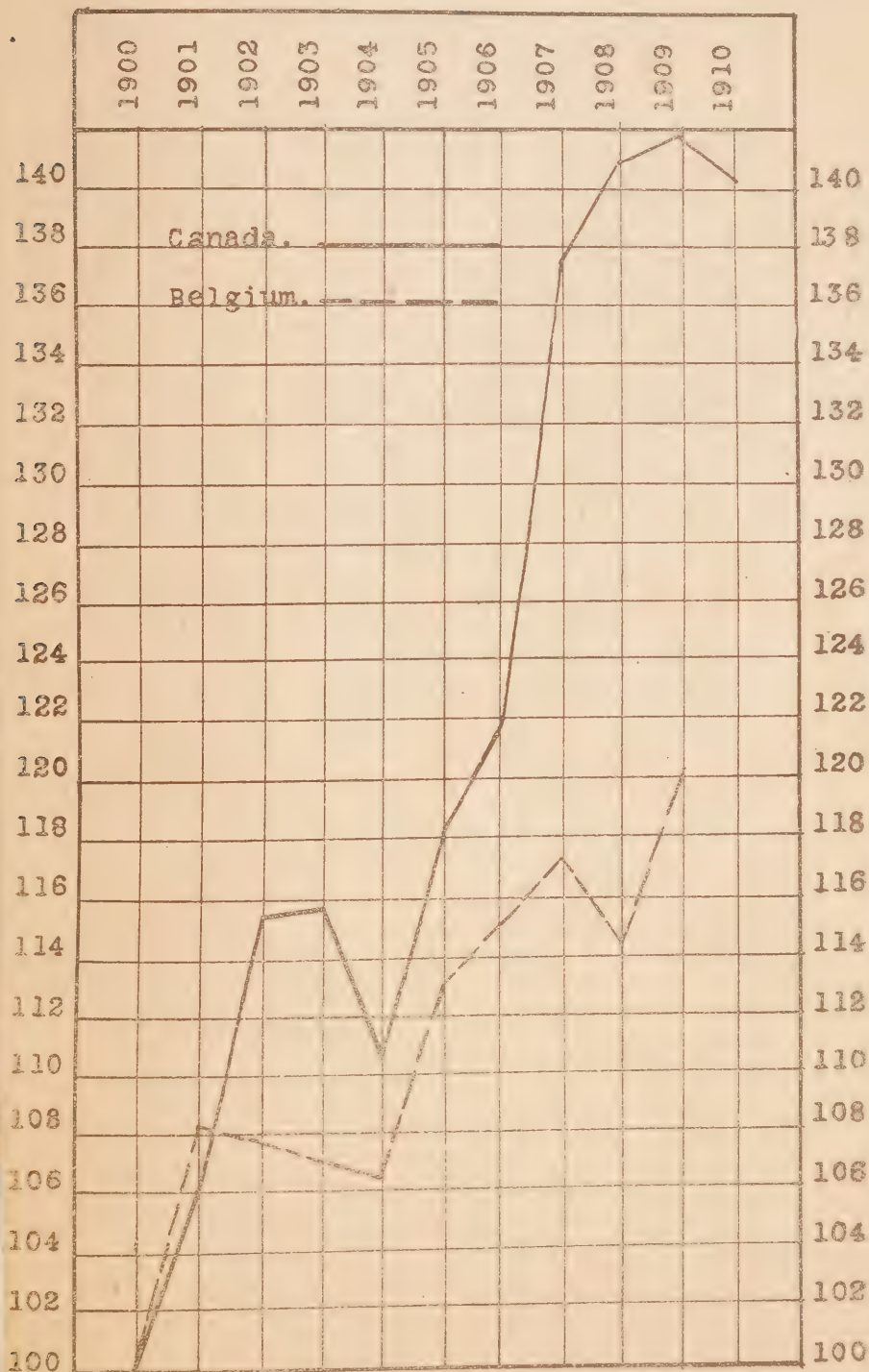
THE COURSE OF PRICES IN ENGLAND, FRANCE AND ITALY, 1881—1913



## TREND OF WHOLESALE PRICES IN CANADA AND BELGIUM, 1900—1910.

No. of articles, 14.

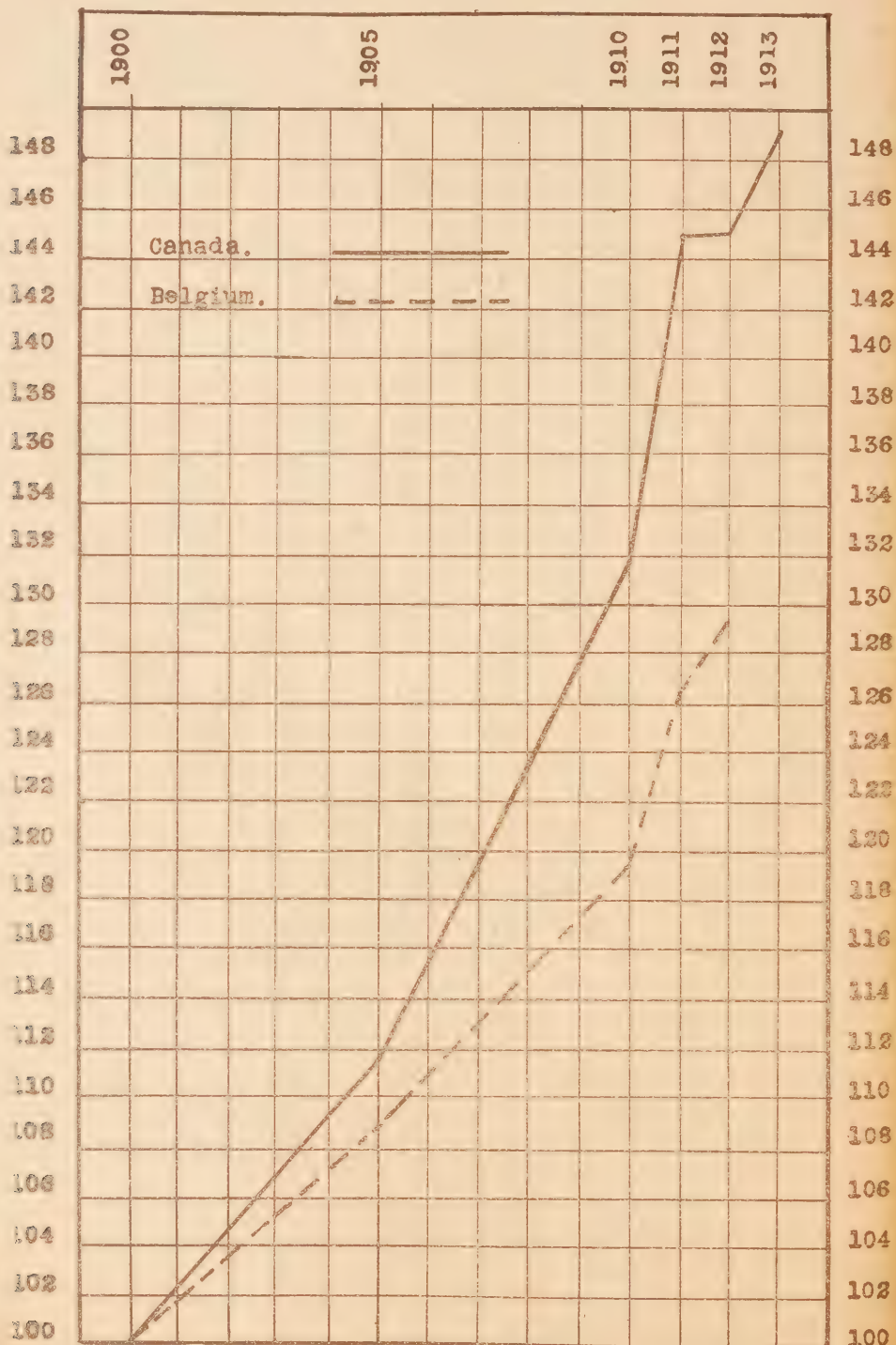
Prices in 1900 = 100.



## COURSE OF RETAIL PRICES, CANADA AND BELGIUM, 1900—1913.

Number of articles included, 10.

Prices in 1900 = 100

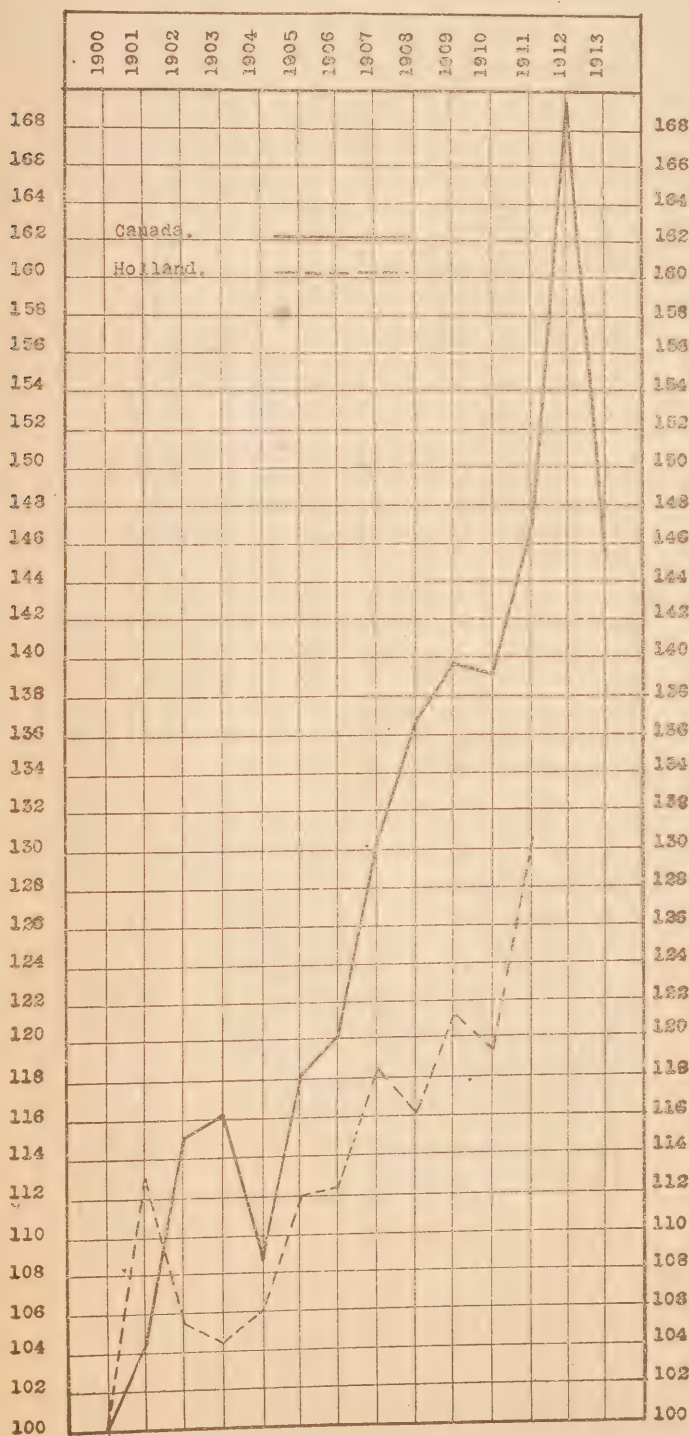




## COURSE OF WHOLESALE PRICES, CANADA AND HOLLAND, 1900—1913.

Number of articles included, 12.

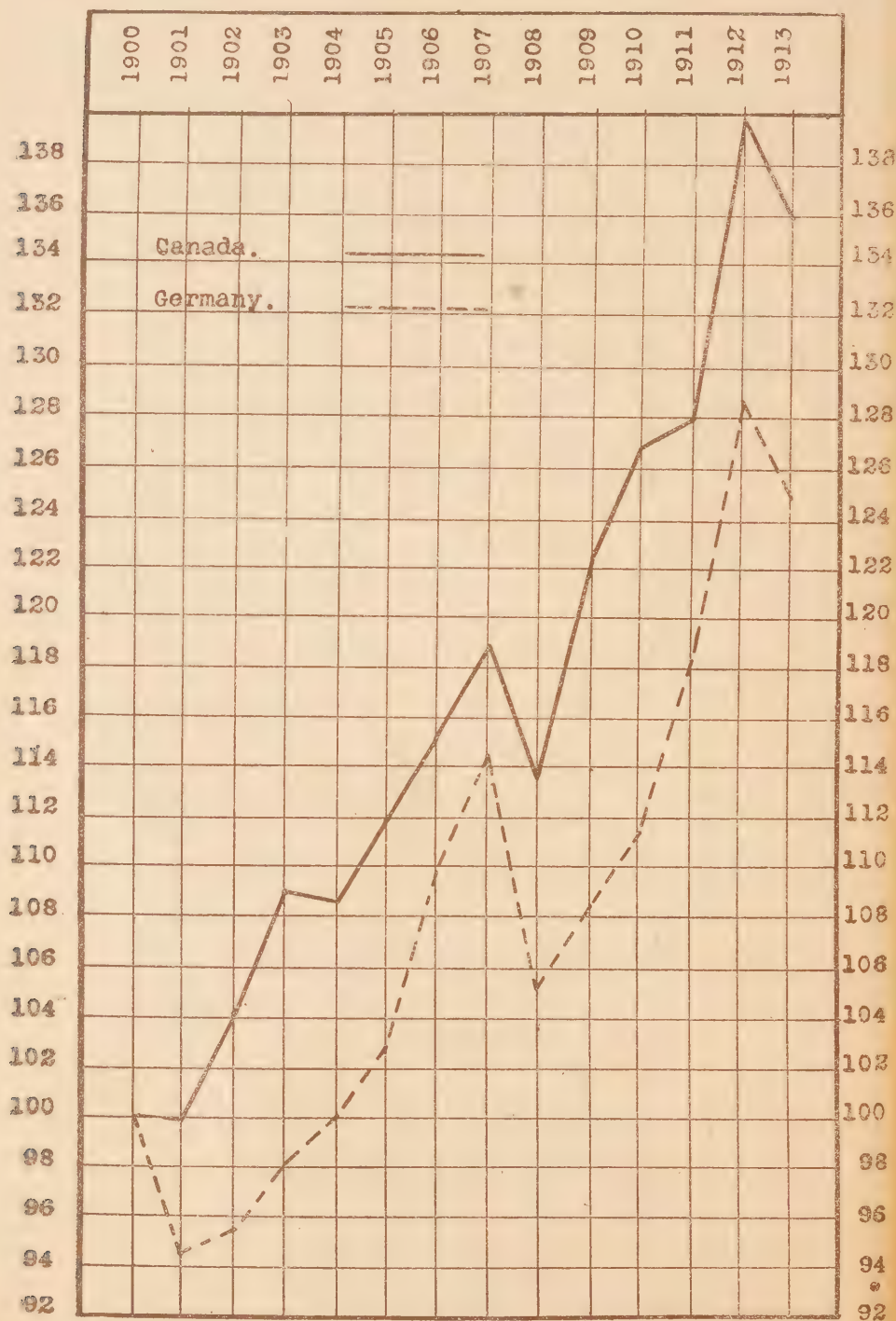
Prices in 1900 = 100.



## COURSE OF WHOLESALE PRICES, CANADA AND GERMANY, 1900—1913.

Number of articles included, 34.

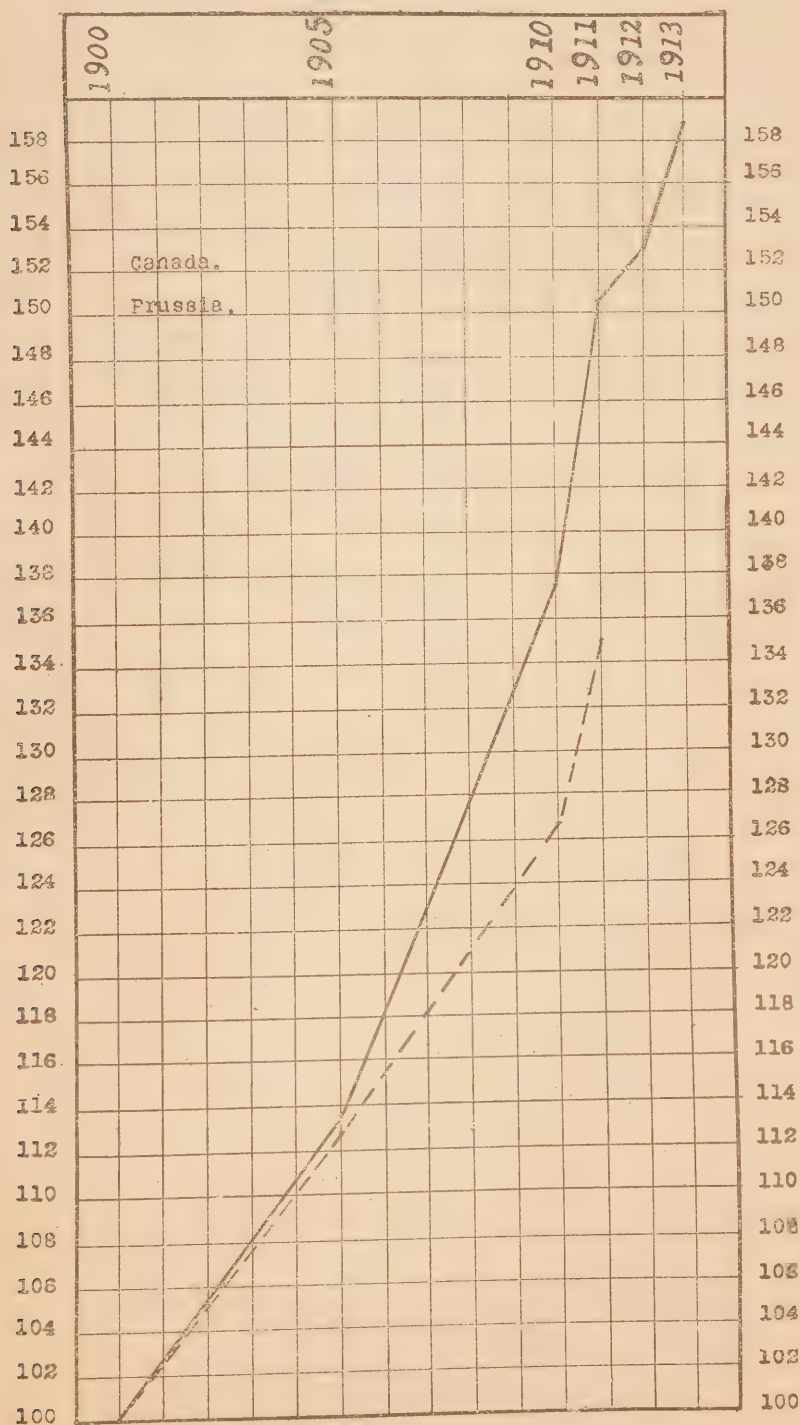
Prices in 1900 = 100.



## COURSE OF RETAIL PRICES, CANADA AND PRUSSIA, 1900—1913.

Number of articles included, 9.

Prices in 1900 = 100.

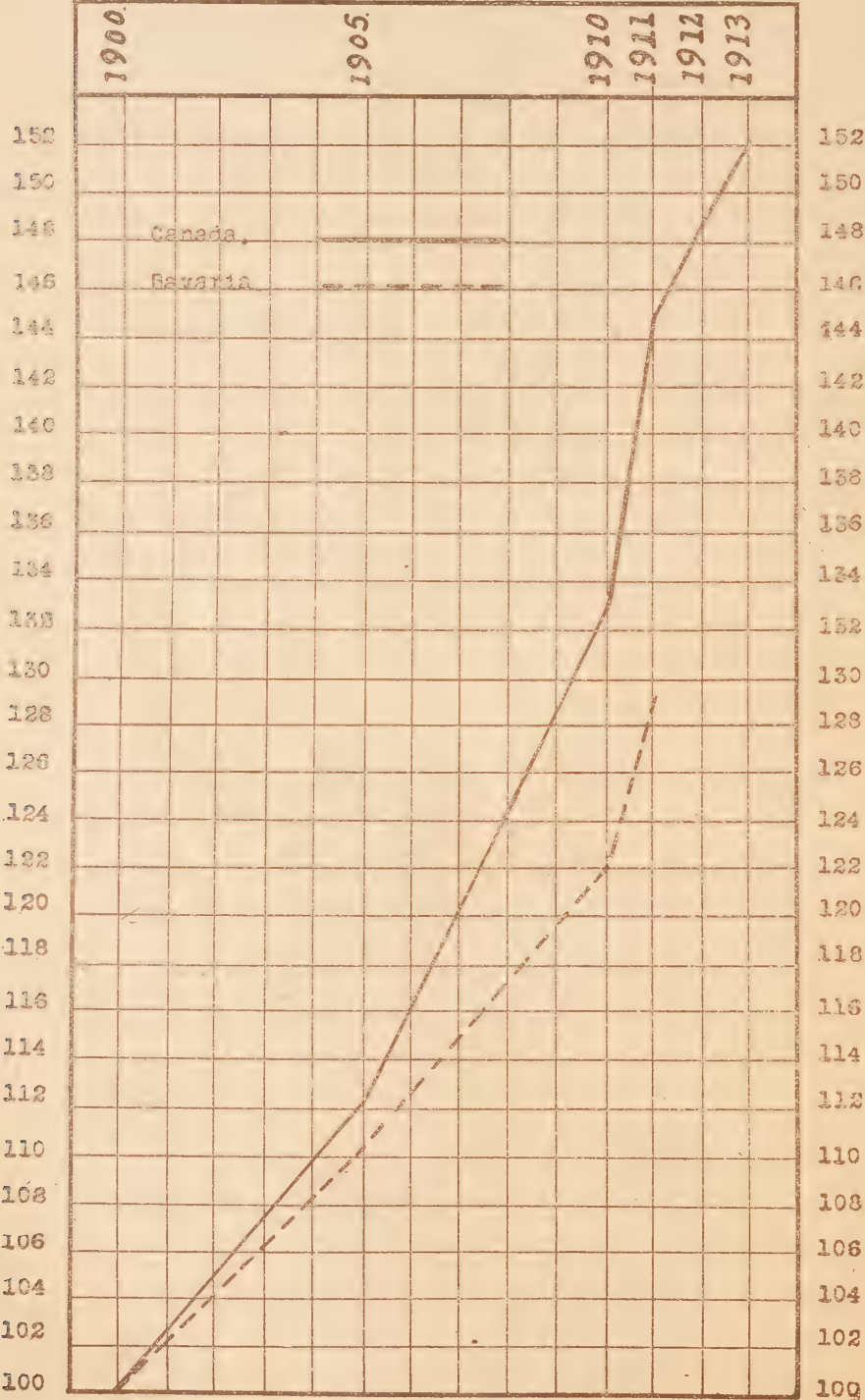




COURSE OF RETAIL PRICES, CANADA AND BAVARIA, 1900—1913.

Number of articles included, 9.

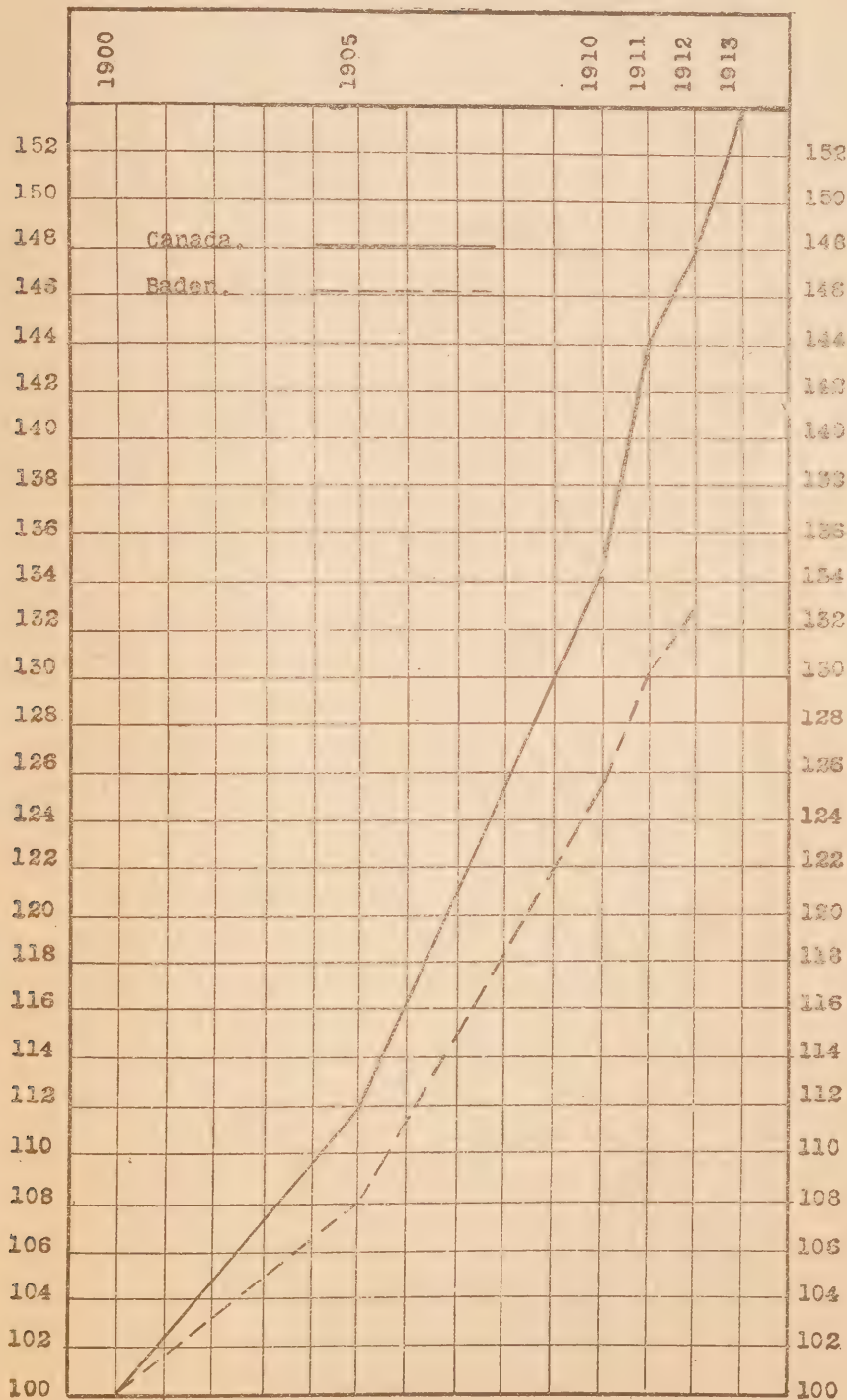
Prices in 1900 = 100.



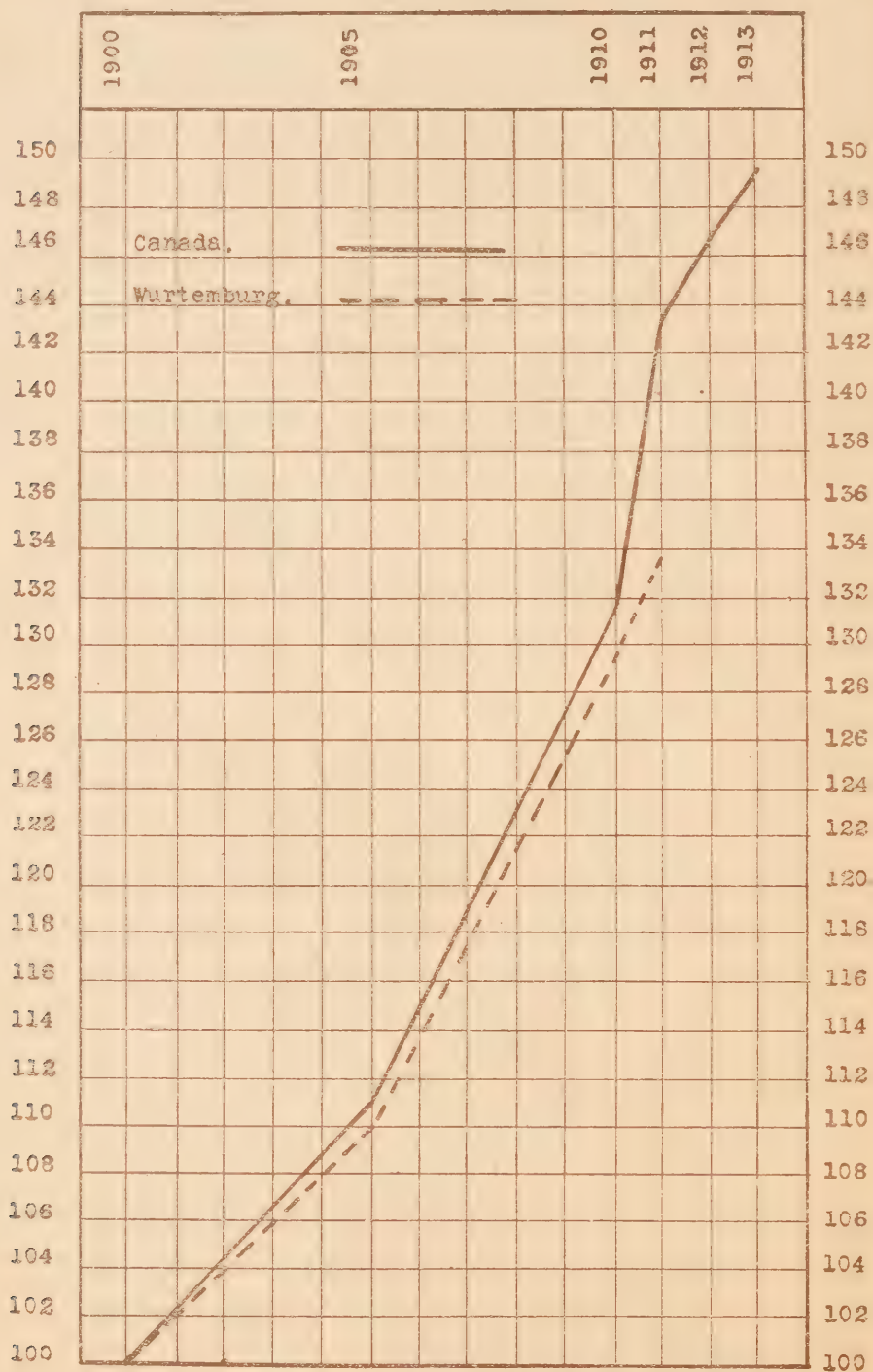
## COURSE OF RETAIL PRICES, CANADA AND BADEN, 1900—1913.

Number of articles included, 12.

Prices in 1900 = 100.



COURSE OF RETAIL PRICES, CANADA AND WURTEMBERG, 1900—1913.  
 Number of articles included, 11. Prices in 1900 = 100.

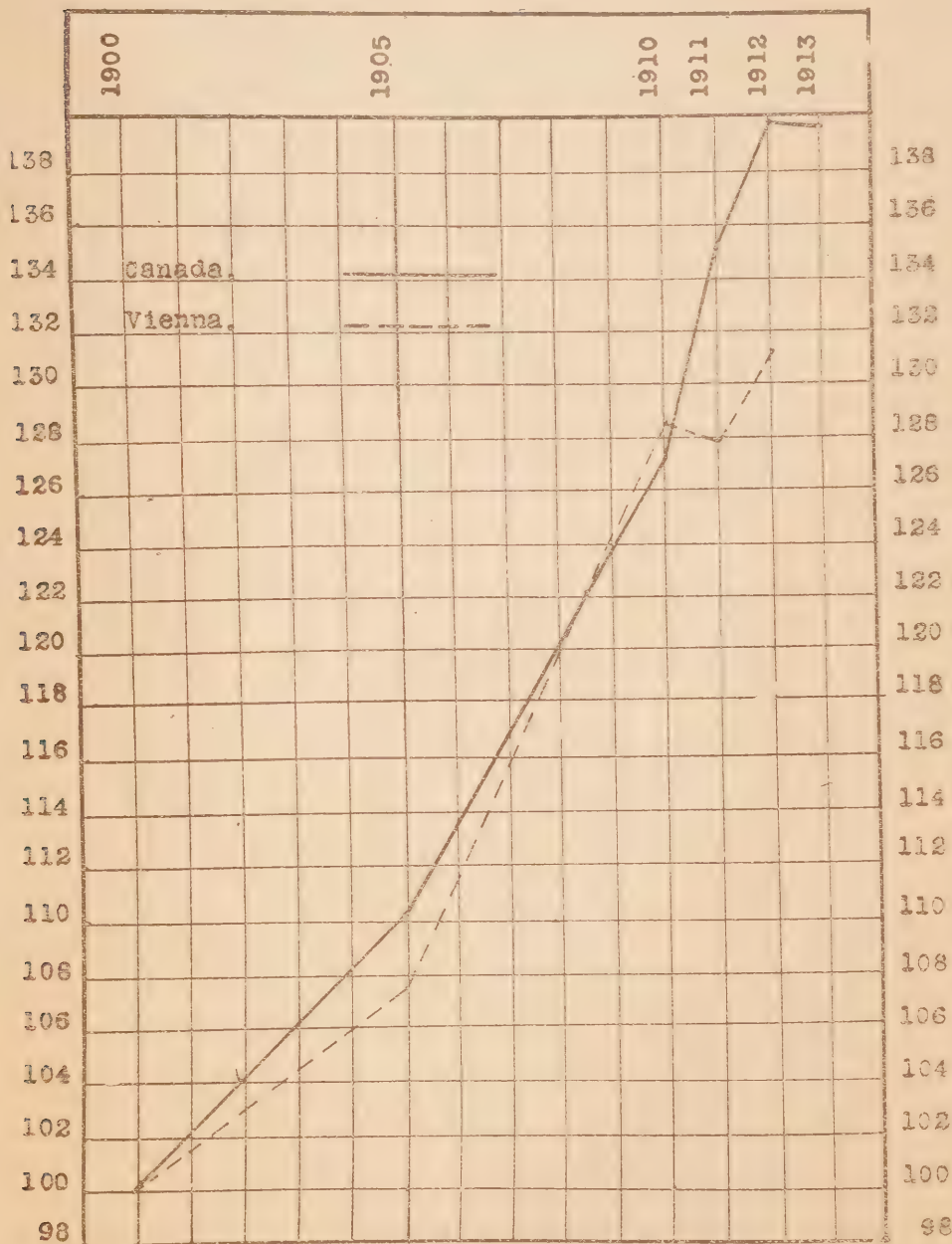




## COURSE OF RETAIL PRICES, CANADA AND VIENNA, 1900—1913.

Number of articles included, 13.

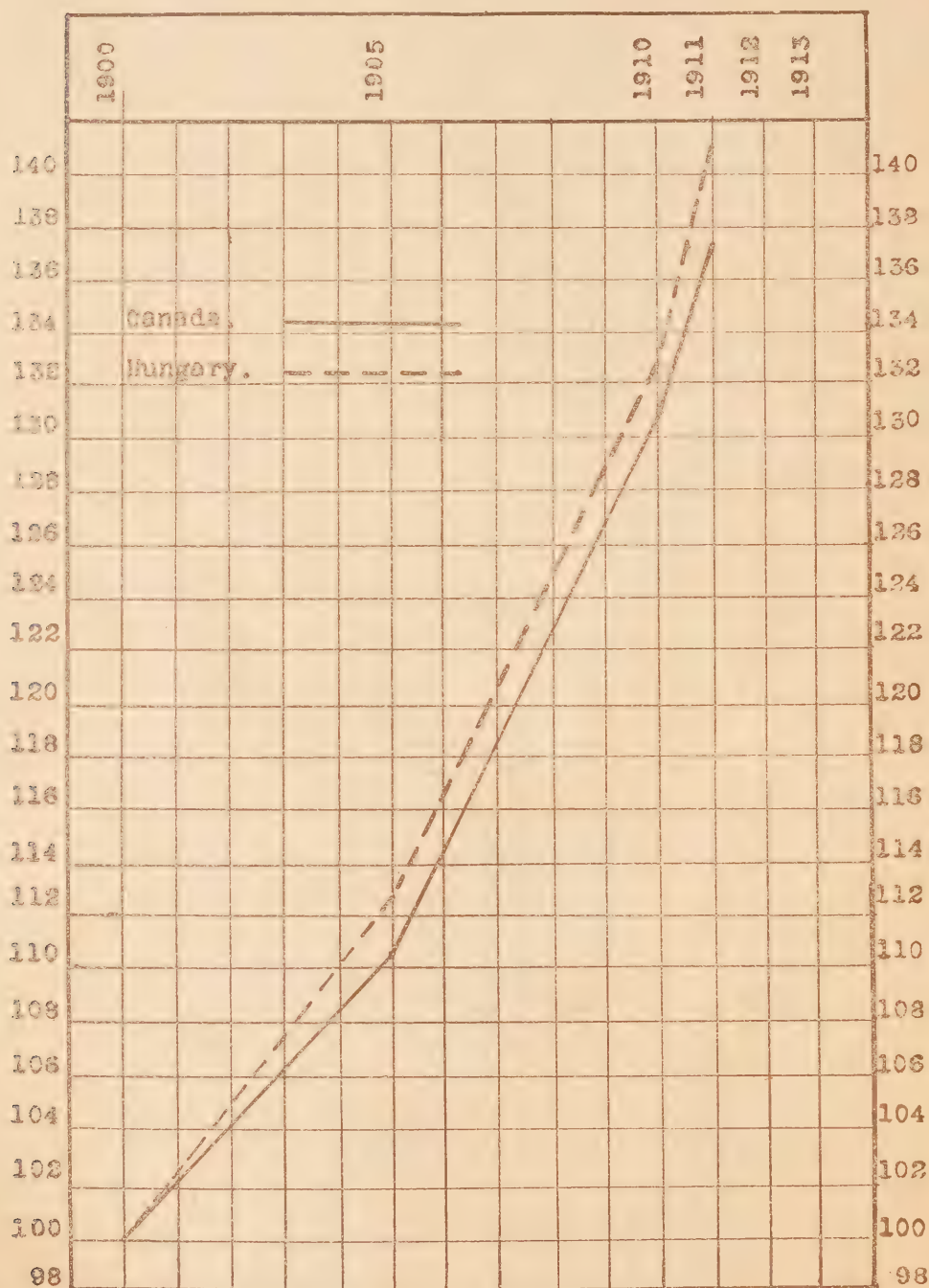
Prices in 1900 = 100.



## COURSE OF RETAIL PRICES, CANADA AND HUNGARY, 1900—1913.

Number of articles included, 20.

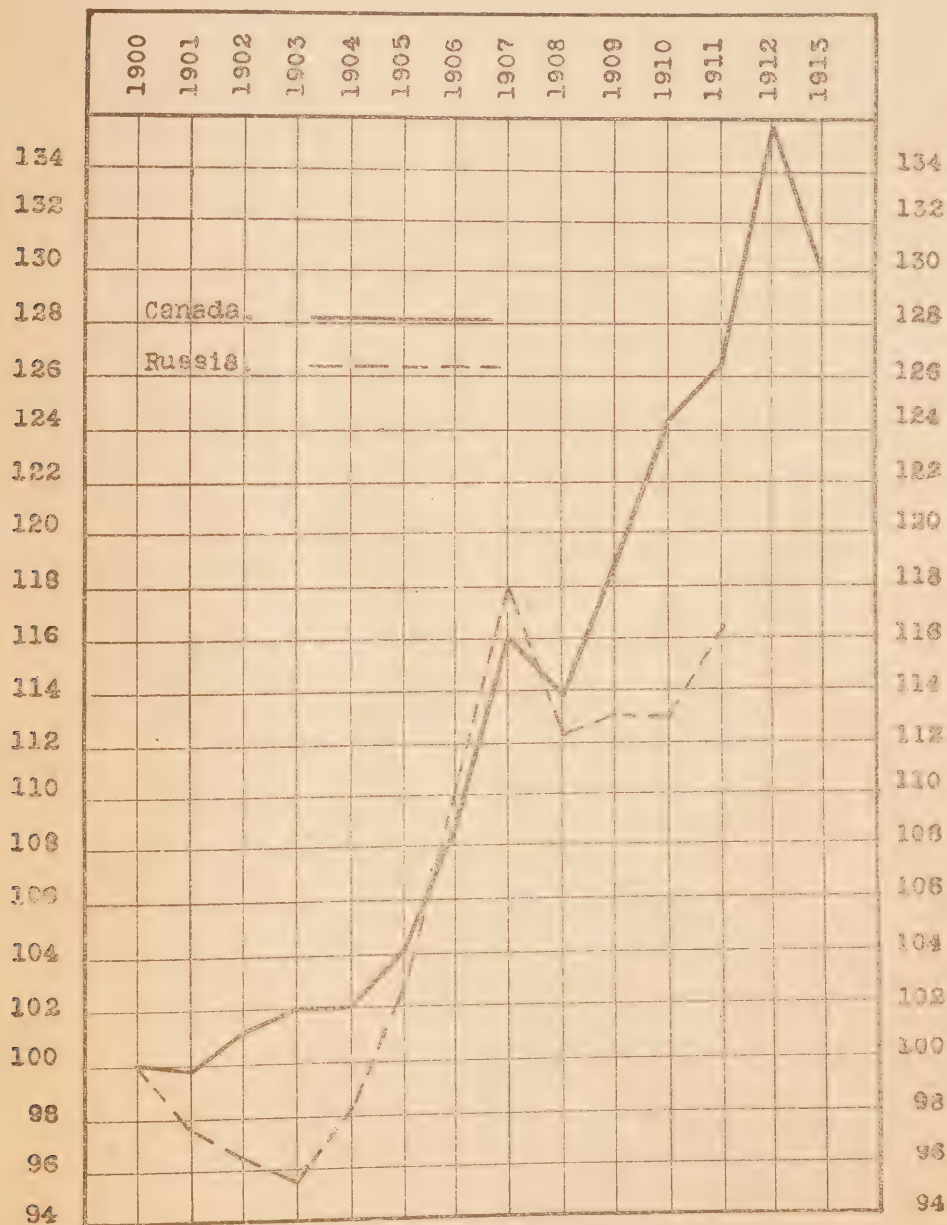
Prices in 1900 = 100.



## COURSE OF WHOLESALE PRICES, CANADA AND RUSSIA, 1900—1913.

Number of articles included, 44.

Prices in 1900 = 100.

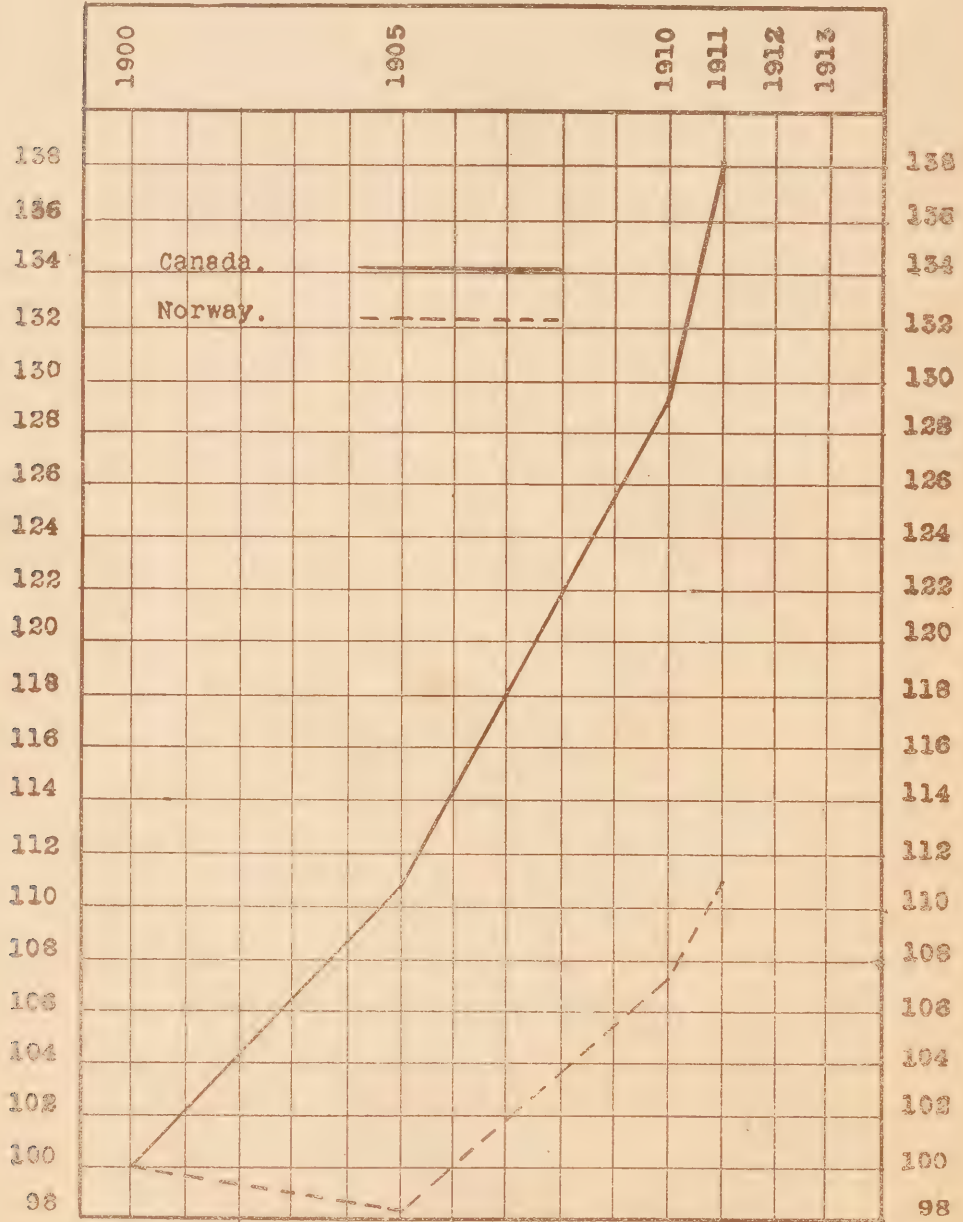




COURSE OF RETAIL PRICES, CANADA AND NORWAY, 1900—1913.

Number of articles included, 16.

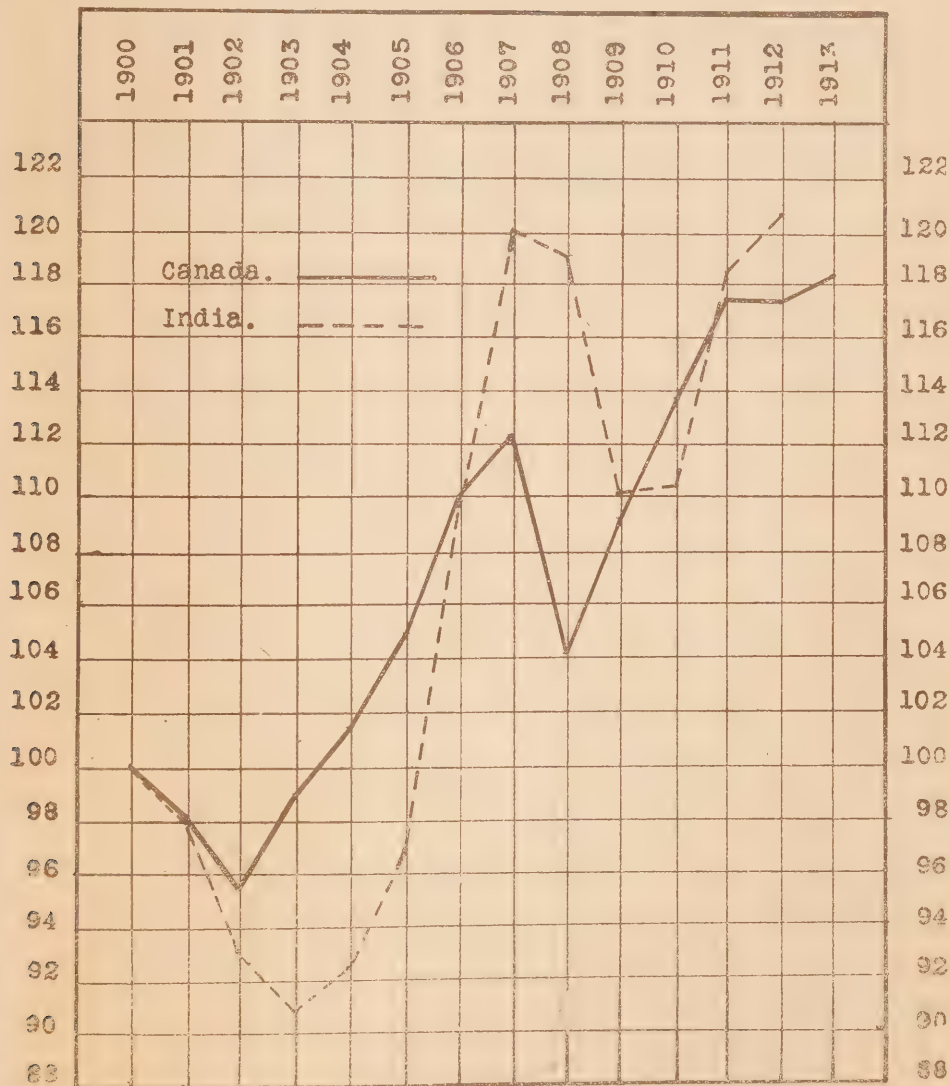
Prices in 1900 = 100



## COURSE OF WHOLESALE PRICES, CANADA AND INDIA, 1900—1913.

Number of articles included, 20.

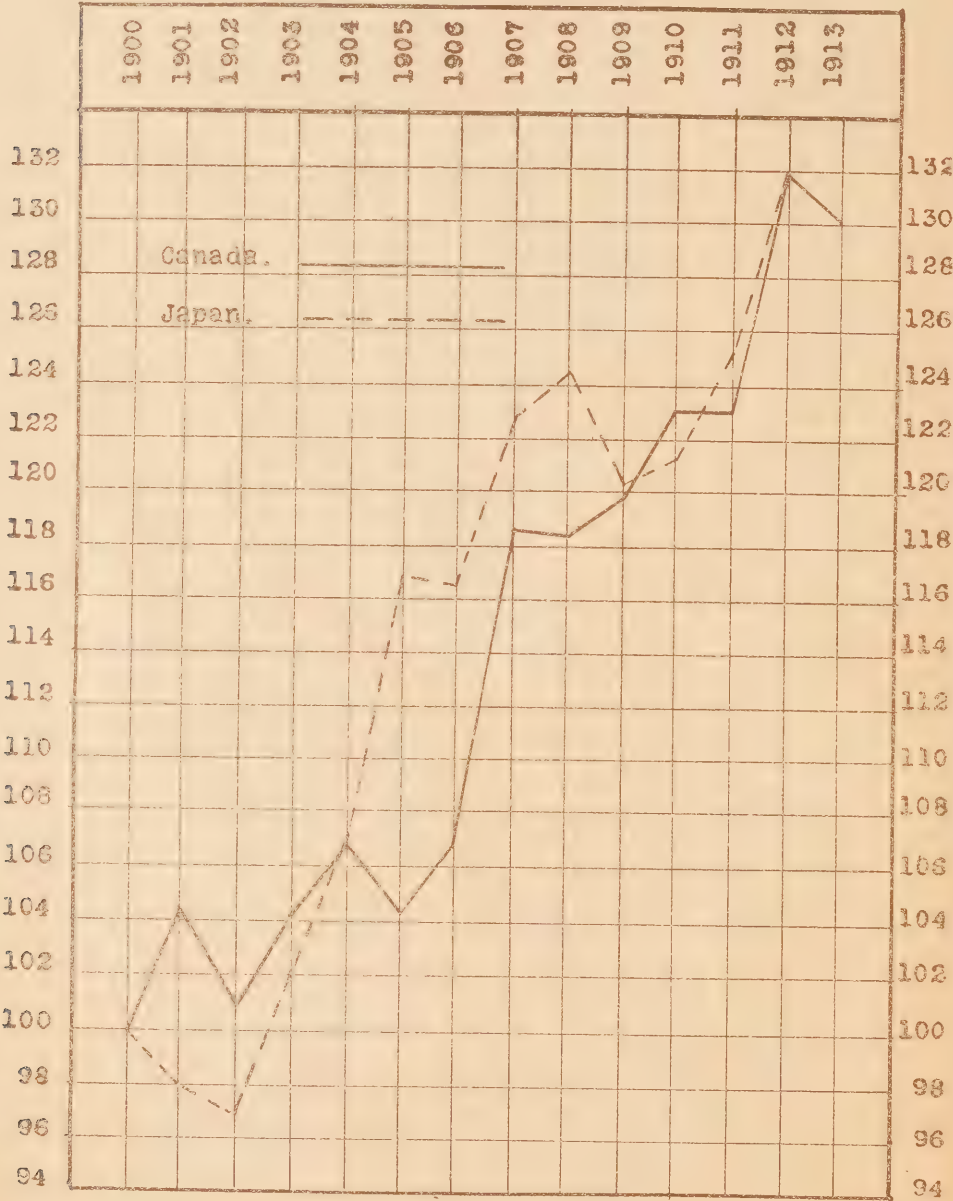
Prices in 1900 = 100.



COURSE OF WHOLESALE PRICES, CANADA AND JAPAN, 1900—1913.

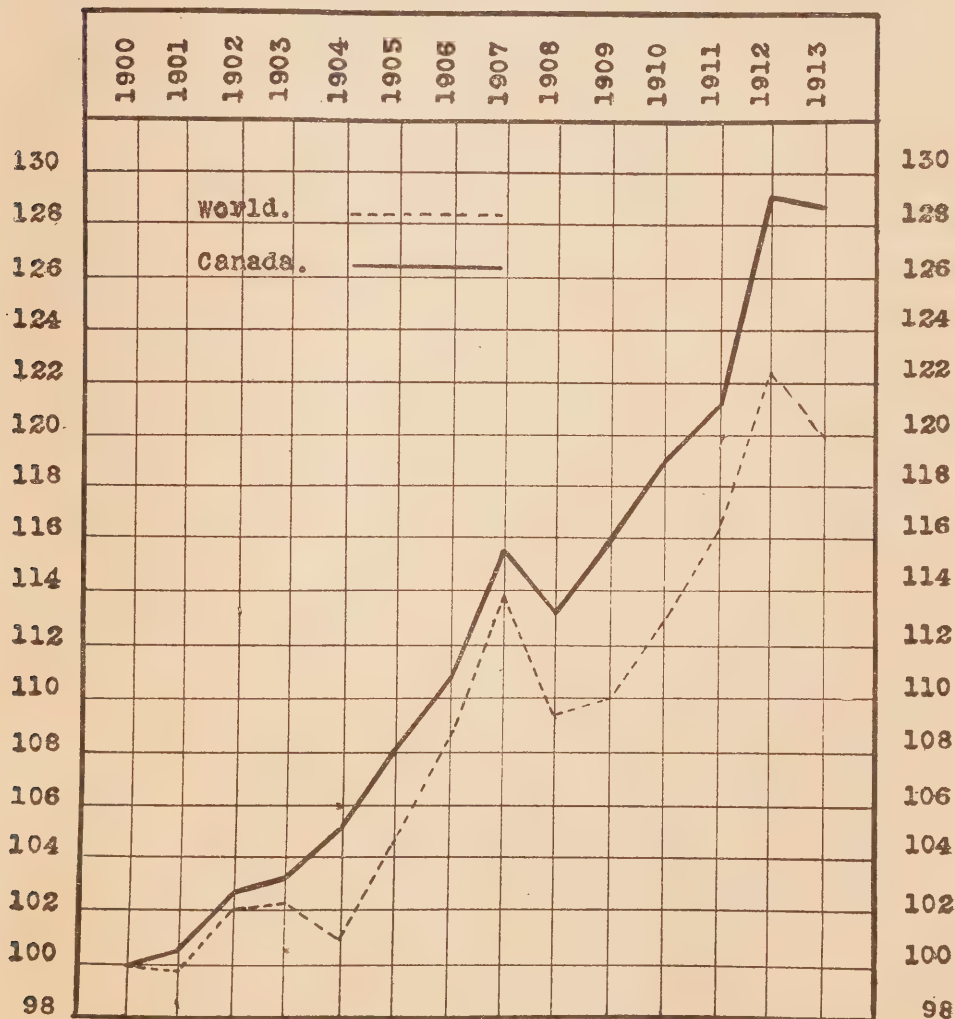
Number of articles included, 23.

Prices in 1900—100.

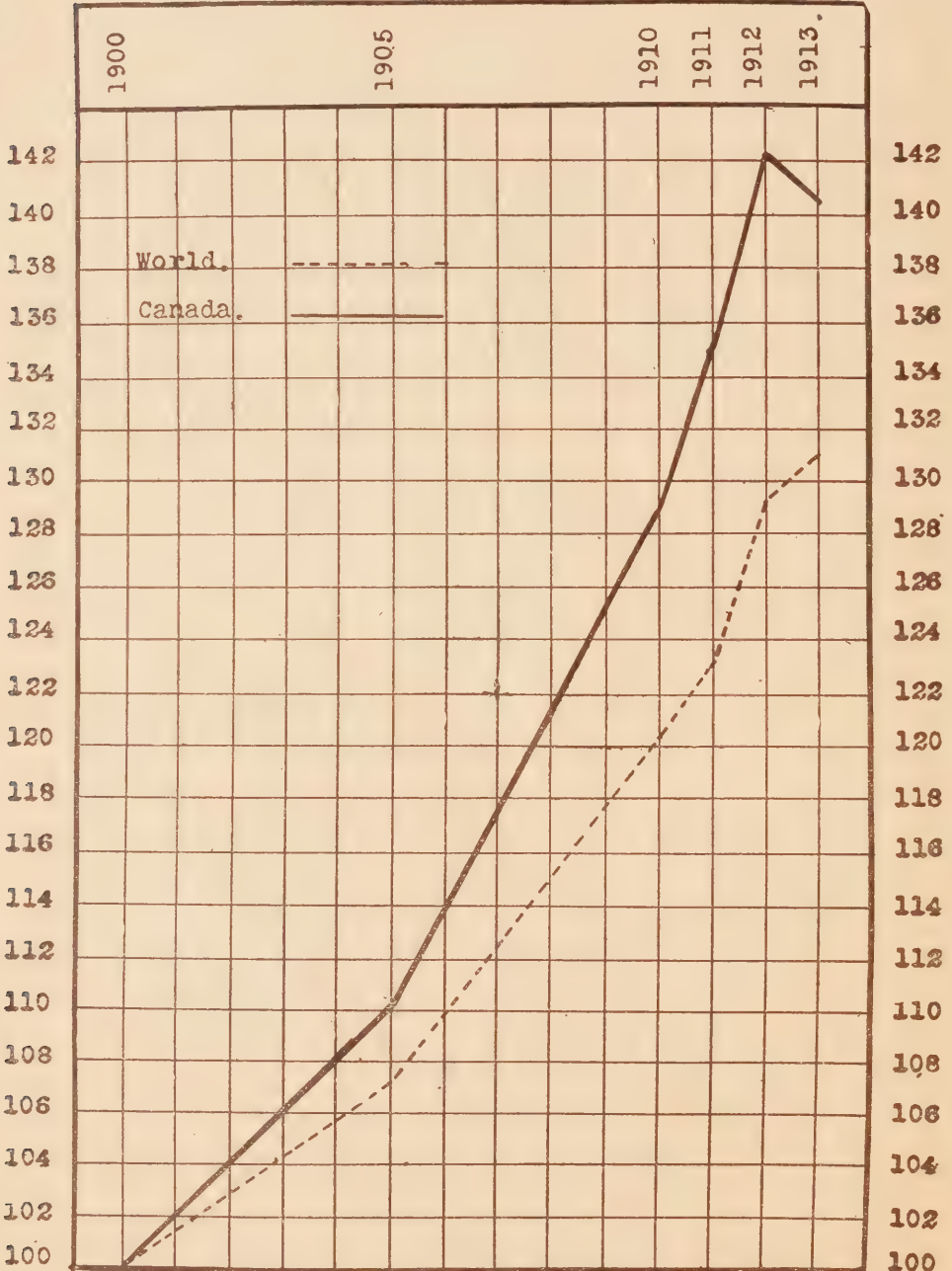




COURSE OF WHOLESALE PRICES, THE WORLD AND CANADA, 1900—1913.



COURSE OF RETAIL PRICES, THE WORLD AND CANADA, 1900—1913.



PRICES OF COMMON STOCKS IN CANADA, THE UNITED KINGDOM AND THE  
UNITED STATES, 1900 - 1913.

(Prices in 1900 = 100.)

